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Metropolitan Transportation Commission

Minority Transportation Needs Assessment Project

Final Report

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Under contract with

Metropolitan Transportation Commission

With assistance from

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June 30, 1973

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SUMMARY

This final report of the Minority Transportation Needs Assessment Project (MTNAP) was initiated in January 1977 with three major goals. The first was to locate and cartographically document residential locations of minority persons living in the San Francisco Bay Region (nine counties consisting of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano and Sonoma). Secondly, was to spatially project the locations of these persons through the year 1990, and thirdly, to establish what transportation needs may be unique to these persons, if any.

Five major minority groups are the subject of this report, specifically Spanish-heritage, Black, Chinese, Japanese and Filipino. Persons of other minority groups also reside in the Bay region, but comparatively their numbers are quite small and they are treated individually. This does not mean, however, that their particular needs are not a concern of this investigation.

An integral part of this report are the Phase I dot maps which present by county in cartographic form, census tract and 440 planning zones; the residential locations of minority groups, social service agencies and special interest groups. Accompanying these maps are overlays depicting the existing public transit system for each county. The maps and overlays are registered to scale and are available for review at the offices of the Metropolitan Transportation Commission.

The sections of this summary correspond to major parts of the report and briefly state highlights of the study's findings, conclusions and recommendations. The body of the report presents detailed findings and supporting documentation. Further details of methodology - cartographic and survey - are provided in the Phase I report and summarized in this document.

Minority Residential Location in the San Francisco Bay Region

The Minority Population Residential Area Maps clearly indicate that major areas of minority settlement are in the industrial Southern counties (Alameda, Contra Costa, San Francisco, San Mateo and Santa Clara) where 91.3% of the region's 589,971 minorities reside. Regionally, the Spanish are most dispersed and are found in all counties and are the dominant group. (Marin, Napa, Solano and Sonoma). The region's Black population is more concentrated in the Southern counties, particularly Alameda and San Francisco where 70.4% reside. Approximately 7% of the region's Black population, less than 24,000, reside in the Northern counties with just over 500 in Napa, where they are the smallest number. Again, the Southern counties are the center of settlements where Chinese are considered, with 60.5% of the region's Chinese population found in San Francisco. The Japanese settlement is in the Southern counties, also with the greatest concentration in Santa Clara and San Francisco counties. A similar settlement pattern is observed for Filipino population which is concentrated in San Francisco and counties bounding the southern bay.

Projection of Settlement Patterns - (1990)

To aid in long-range palnning to meet minority needs, the minority settlement patterns established in 1970 are extrapolated to 1990.

In order to extrapolate future minority residential patterns, the residential patterns for the major minority community groups identified in the regions are mapped by density pattern for 1950, 1960 and 1970, thus establishing the pattern of settlement, it's shape and size as well as trend in it's direction of change by group. Due to data limitation through time, the future settlement patterns are only available for Spanish-heritage, Blacks and Asian, which include Chinese and Japanese only. The results from these projections are found in the text in both map and table form.

The total population is forecasted to be between 5,190,137 and 5,605,323 by 1990. By that time the region's largest group (Spanish heritage) will be in the range of 722,605 and 796,783. Regionally, Blacks will range between 411,234 and 446,497 by 1990 and Asians will be in the range of 169,261 and 180,278.

The area occupied by Spanish Heritage will be 126.5 square miles. By 1990 the Black area barred by the 2000 people per square mile perimeter will nearly double, covering an area of 54.7 square miles, most of which will be found in Alameda and San Francisco counties. By 1990 the Asian (Chinese and Japanese) settlement area will be only 17.7 square miles which represents a 7.19 decrease from 1970. This decrease can be accounted for by the degree to which Asians, particularly Chinese and Japanese are so dispersed that traditional settlement clusters are gradually disappearing as this group becomes more socially and economically mobile.

Conclusions and Recommendations

Responses from 671 meeting participants were collected and tabulated to yield data on travel mode, trip destinations, alternate travel mode choices, transit needs and suggested actions that MTC could take in order to meet the transit needs of the subject groups.

Twenty major transit issues are identified by county. These issues are all concerned with transit service inadequacies and grouped in a county matrix stratified by Southern and Northern Counties. The major issues expressed by respondents from the Southern high-density counties center more on the quality of existing service, namely the inadequacy of service, its slowness, lack of off-peak hour service, high fares, safety, inconveniences caused by the system, and the inadequate services for the elderly and physically handicapped.

The issues of primary concern to the respondents from the Northern low-density counties are concerned more with the lack of service and inadequacy and unreliability of the service that presently exists.

The conclusions and recommendations are of two sorts. At the end of each respective county chapter there are specific recommendations to resolve each of the issues identified as pertinent to that county. In Chapter XIII conclusions are drawn in the context of the region as a whole and a range of specific recommendations are made as possible remedies for adverse conditions.

I. INTRODUCTION & BACKGROUND

The Metropolitan Transportation Commission

The Metropolitan Transportation Commission (MTC) was created by the California Legislature on September 14, 1970, when it became evident that a cohesive, well-coordinated transportation plan was required for the burgeoning San Francisco Bay Area. The responsibilities with which MTC is essentially charged are:

- To prepare, periodically update and implement a Regional Transportation Plan (RTP) that best serves the present and future transportation requirements of the nine-county Region with its nearly five million people;
- To act as the central review agency for all Bay Area agencies seeking transportation funding from the State or Federal governments; and
- To monitor the effectiveness and performance of the Bay Area's transit operators.

MTC recognizes the need for minority involvement in the regional transportation planning process. As stated in MTC's Regional Transportation Plan:

> "The Commission understands that opportunity for all persons in the region to participate in the full range of human activities may often be denied by insufficient transportation. It therefore intends that the Regional Transportation Plan shall support equal opportunity for all residents to have access to jobs, social services, recreational activities and other purposes of travel. The Commission further desires that the decision process be responsible to public values and provide for the continuing involvement of the public in the preparation, maintenance, revision, and use of the Plan. The Commission intends that decisions about resource allocation, and other means of implementing the Plan, will be based upon an evaluation process that brings to bear and interrelates all information relevant to the making of transportation policy decisions. The Commission also aims to recognize the local interests of communities in the region, and the objectives of State-wide transportation policy and National transportation goals."

As a mechanism for accomplishing this goal of maximum minority involvement in the formulation of transportation policy, MTC established the Minority Citizens Advisory Committee.

The Minority Citizens Advisory Committee

The Minority Citizens Advisory Committee was formed by the MTC on January 13, 1975 and members were sworn in two months later on March 26th. The composition of the MCAC, whose ethnic background is intended to reflect the bay area population,

consists of 25 members: 11 Spanish, 7 Black and 5 Asian, as well as 2 members-at-large, appointed to serve at the pleasure of the Commision. During the selection process, which takes place every two years, the media is utilized to publicize openings on the MCAC and to solicit resumes of individuals interested in serving. From the resumes submitted, the most qualified individuals are chosen to serve. Members are appointed for a term of two years and may serve a total of two consecutive terms, subject to approval by the Commission. The MCAC meets once a month to be briefed by MTC staff on program implementation and the various transit issues being considered. At these meetings, the MCAC in turn brings issues they consider relevant to the attention of MTC and its various committees, which include Work Program and Plan Revision, Legislation and Public Affairs, Grant Review and Allocations, and Administration and Oversight.

The purpose of the MCAC is to assist MTC in perfecting effective methods and procedures for obtaining maximum input for minority citizens relative to the regional transportation planning process as well as to facilitate the flow of information and communication between the minority community and the Commission. The MCAC is a highly motivated and organized group that takes its role of advising the Commission on minority transportation needs very seriously. The stated goals of the MCAC are:

- To assist the Metropolitan Transportation Commission in the development of minority participation in planning and reviewing MTC goals.

- To assist the Metropolitan Transportation Commission in the detailed exploration of minority interests or issues, and develop alternative solutions to transportation problems facing minority citizens.

- To assist the Metropolitan Transportation Commission in the formulation and review of the MTC Affirmative Action Plan Goals and Timetables.

- To assist the Metropolitan Transportation Commission in the development of procedures for identifying, contacting, and interacting with the various minority communities for participation at the regional level.

At one of its first meetings the MCAC, with MTC Commissioners, the Executive Director, and key staff discussed the need for more data on residential locations of minority persons living in the Bay Area, their numbers and their transportation needs. Subsequently, the MCAC recommended that a Request for Proposal (RFP) be issued to initiate what would become known as the Minority Transportation Needs Assessment Project (MTNAP).

MCAC members have been extensively involved in all aspects of the MTNAProject as consulting advisors. Involvement centered on working with the community, the contractor and MTC to facilitate the gathering of information on specific and perceived transportation issues and needs. This was achieved through dialogue at regular meetings with the principal contractor and cooperative actions related to

dissemination and collection of data on minority transportation needs elicited through the questionnaires distributed at the meetings scheduled throughout the region. MCAC members also provided cognitive maps of minority locations and assisted in locating the Social Service Agencies and Special Interest Groups serving minorities in the nine-county Bay Area Region.* The assistance and input of the MCAC and their ability to articulate and advocate relevant minority transportation issues to MTC has proved invaluable to the integration of the unique transportation needs expressed by the minority communities into the regional transportation planning process.

Using information gathered through Phases I and II of this Project, the MCAC will make their recommendations to MTC for inclusion in the regional transportation plan. Their recommendations constitute a major purpose of this Project and as such are incorporated as an integral part of this report.

The Minority Transportation Needs Assessment Project

The Minority Transportation Needs Assessment Project (MTNAP) which began in January of 1977, has as its goals the identification of minority residential locations and the assessment of the unique transportation needs (e.g., needs related to language barriers, low automobile ownership and inadequate transportation services) of ethnic minority groups in the Nine-County Bay Region. The MTNAProject addresses four basic questions:

- What are the major minority populations and special interest groups in the San Francisco Bay Region?
- Where are the minority population groups, organizations and agencies located?
- What are the unique transportation needs of these minority groups?
- How can these minority transportation needs be considered more extensively in the planning process?

Phase I of the Project focuses on the first two of these questions and was primarily concerned with the identification and mapping of the five major minority groups (Spanish heritage, Black, Chinese, Japanese and Filipino) respective residential patterns and the location of the community based social service agencies (SSA) and special interest groups (SIG). Once minority populations and SSA and SIG were identified a series of base maps and overlays was produced indicating the respective locations by county. (These maps and overlays are discussed in greater detail in the section entitled "Location and Mapping".) These products can effectively be incorporated in the planning process because they can easily be employed to deal with accessibility problems, determine the density of neighborhood as a function of transit service needs, and establish the relationship between the Region's transit network and minority residential locations.

*The region is comprised of the following nine counties: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano and Sonoma.

The detailed data consisting mainly of maps, tables and other illustrations produced during Phase I of this research effort provided the foundation data base for Phase II tasks of the Project, namely an areawide survey of minority transportation needs and the projection of minority residential locations through 1990. Community meetings were used as a means for data collection. Twenty-eight meeting sites were selected based on minority population clusters revealed in the Phase I maps along with consultation with the MCAC members from various counties. Questionnaires were distributed at these meetings, as well as at various social service agencies located within specified communities throughout the nine counties to elicit transit needs. Through these community meetings the perceived transportation needs of the region's minority groups, in terms of transit dependence, automobile ownership, language barriers, special work schedules and employment destinations, were ascertained and documented.

The data gathered through these meetings, along with the Phase I mapping and the projected settlement patterns serve as the basis for this MTNAProject. This Phase II Report provides the data base necessary to enable the MCAC to make its recommendations regarding improvement of transit services to minority communities to the Metropolitan Transportation Commission. The Commission will then consider what changes it should make in the Regional Transportation Plan to reflect the recommendations made by the MCAC and the MTC with increased knowledge of the particular transportation needs and concerns of minorities. This knowledge can be integrated into the planning process and can help the Region's transit system achieve its goal of providing equal transit opportunities for all citizens.

Project Approach

The approach to this Project consisted of a systematic multi-stage process that began with the identification and location of the five minority groups with which this report is primarily concerned. The 1970 Census of Population, Census Tract Statistics, was the basic data employed to identify and determine the distribution of these five groups, supplemented by data available through the Metropolitan Transportation Commission's population print-outs, based on the fourth count of the U.S. Census of Population (1970). To improve on the accuracy of the data, information from various planning agencies was also used, as were such data sources as county census information, county and city street maps, quadrangle maps, and public schools surveys. A complete listing of all data sources used can be found in Appendix A of the Phase I Final Report for the MTNAProject.

A literature search on minority populations was conducted to determine the history of the minority groups selected for this Project. Studies dealing with spatial patterns of minority residential locations in the region were of particular interest. This bibliography is available under separate cover, as a second volume of the Phase I MTNAP Final Report.

Once the data base on minority locations was generated the mapping task was begun. In addition to minority residential locations, social service agencies by special interest groups were also identified and mapped.

A survey of minority transportation needs and issues followed, as did the task of projecting minority residential locations through 1990. These steps and products are discussed in detail in the following sections of this chapter.

Identification of Minority Groups

Five major minority groups were selected for consideration in this Project, using as criteria the size of the group, the availability of data, and the settlement history of the respective group. To be selected a group had to meet at least two criteria (Table 1). While fully acknowledging that many more minority groups are represented in the region, the following five groups were selected:

1) Spanish heritage
2) Black
3) Chinese
4) Japanese
5) Filipino

These groups are the largest in the region and are found in all nine counties. Detailed statistics are also readily available on these groups, allowing for easy identification and verification of residential location. Of the five groups selected, only Filipinos did not meet the criterion of settlement history. Spanish heritage, Black, Chinese and Japanese are all long-time residents of San Francisco and the region. Filipinos were included primarily due to the size criterion.

Although not specifically addressed, many of the smaller groups excluded on the criterion of size are closely associated with the five minority groups in this report. For example, Hawaiians, Samoans, Vietnamese and Koreans are interspersed within the Japanese, Chinese and Filipino populations. Portuguese reside in neighborhoods which have large Spanish-heritage populations and are also implicitly represented in the "persons of Spanish mother tongue" category included in the Spanish-heritage minority classification.

Each of the minority groups selected for this study follows the definitions established by the U.S. Bureau of the Census. In this study, Black is substituted for the category reported in the census as Negro. Spanish heritage, on the other hand is a more inclusive category; it includes all persons reported in the census under the following categories: persons of Spanish language, other persons of Spanish surname, persons of Spanish mother tongue, and persons of Puerto Rican birth or parentage. The sum of the Spanish language and Spanish surname census figures were the figures used in this study.

Location & Mapping Procedure

A multi-stage mapping procedure was employed to locate and map, by planning zones and census tracts, the geographical location of minority groups residing in the MTC's territorial jurisdiction. During the first stage it was necessary to determine the generalized non-white (minority) residential locational parameter. This parameter was established by utilizing census block statistics. By mapping the non-white population parameter, the area where the region's minority population distribution is located was outlined, providing the basis to determine more precise locations of the region's various minority groups.

Table 1

CRITERIA FOR MINORITY GROUP SELECTION

Minority Group	Size	Data Availability	History of Settlement	Number of Criterion Satisfied
Spanish heritage	X	X	X	3
Black	X	X	X	3
Chinese	X	X	X	3
Japanese	X	X	X	3
Filipino	X	X		2
Native American			X	1
Hawaiian		X		1

This precise determination of the location of the region's minority groups required that multiple data sources be utilized. These included census tract data, which provides specific numerical information on race and ethnicity (including foreign stock), allowing for the region's various minority groups to be located individually. Census tracts are units which contain blocks and must be used to identify the size of the respective minority groups in conjunction with block statistics to establish each minority group's generalized distributional pattern. This step is necessary since block statistics only stratify population by percentage of white and non-white. Block statistics do not provide data on specific minority groups. At this stage, it is possible to locate the respective minority populations within the non-white general minority population parameter.

To further improve the precision in locating respective minority groups the researched historical documentation on minority locations was utilized. This was a particularly valuable contribution, as it increased the accuracy with which minority populations which are widely dispersed or distributed in small clusters could be located. Interviews with MCAC members and other persons knowledgeable of minority communities was also conducted.

To further improve the accuracy of locating minority populations by accounting for the impact of natural features and non-residential land uses on distributional patterns, areal photographs, U.S. Geological Survey topographical sheets and land use information were used. Through the use of these combined methods, the accuracy with which minorities were located was vastly improved.

Because of the limitations inherent in the use of chlorepheth mapping, the population dot map was used to document the population distributions. The population dot map is a superior alternative for documenting population distributions because it has characteristics which permit the viewer to easily determine:

- o the numerical value of a single dot,
- o the total value of the population's distribution,
- o the total number of dots,
- o the distribution of dots, and
- o the shape and pattern of the distribution.

Additionally, when using populating dot maps:

- o the differences between parts of the distribution and the total distribution can be compared,
- o the approximate density of the distribution per unit of measure can be calculated, and
- o the percentage of parts of the distribution can be calculated when the total number of dots is known.

The dot maps were produced at a scale of 1:62,500 which is the scale at which MTC's county base map series is produced. The one exception was the San Mateo/San Francisco maps, which were enlarged to a 1:1,200 scale in order to accomodate the mapping of such a large population in a relatively small area. A dot size of 50 was selected to accomodate the high density and low density tracts without significant loss of information. Maps produced for this project include:

A mylar base map for each county at a 40% standard screen; an overlay on stabilene for each minority group mapped (color coded by group); and two overlays showing planning zone boundaries screened at 40% on clear mylar and census tract boundaries produced on clear mylar with a line density of 100%. The colors chosen to represent the five minority groups are those which best retain their intensity in the reproduction process. They are: black for Spanish heritage; red for Black; brown for Chinese; green for Japanese; and orange for Filipino. Each of these colors is dense enough to yield a black line reproduction if required.

Additionally a set of transit maps was prepared by the MTC Cartographic Department. Transit lines and routes appear on the overlays by the types of transit service available, divided into 5 categories. They are: local bus, trolley; express bus; demand activated bus; rail service; and ferry service. Maps of social service agency and special interest group locations and the minority distributions by county are available as work maps and are on deposit at MTC.

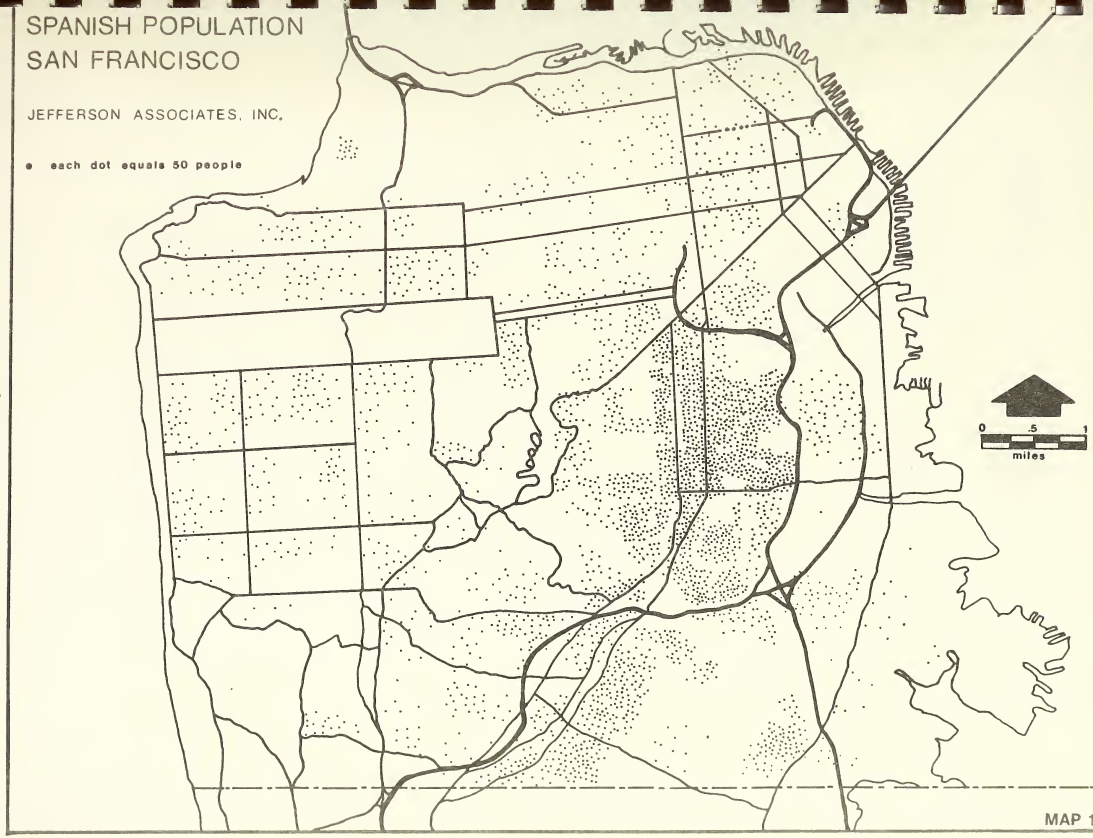
Identification of Minority Oriented Service Agencies and Organizations

Social Service Agencies (SSA) and Special Interest Groups (SIG) were also identified and mapped. These agencies provide ease of access to minority communities and were utilized on a selective basis to establish and sustain advocate-liaison linkages between MTC and minority communities. These linkages have the potential capacity for follow-up and updating of information of the sort provided in this document. Many of these agencies also provide special transportation services to their minority constituency in addition to other necessary services. Knowledge of these agencies and the services rendered is important to minorities and it is equally important that transit services be organized to provide easy access to these agencies.

As a first step to the mapping of SSA and SIG, several sources were utilized to identify them. A primary source was the Special Needs Program, "Social Service Agency Survey," released by the Metropolitan Transportation Commission in October of 1976. With the assistance of the MCAC the agencies listed in this document were matched with the minority group(s) served. This combined listing of SSA and SIG serving minorities is found in Appendices E&F of the Phase I Final Report. Maps were produced which show locations of the SSA and SIG, coded to indicate which minority groups are served.

Needs Survey

The community meeting mechanism was employed in this Project as an effective way for minorities to communicate their real and perceived transportation needs. With the assistance of the MCAC, a total of 19 formal meetings were held at different ~~community~~


SPANISH POPULATION
SAN FRANCISCO
JEFFERSON ASSOCIATES, INC.
• each dot equals 50 people
0 .5 1
miles

MAP 1

BLACK POPULATION
SAN FRANCISCO

JEFFERSON ASSOCIATES, INC.

• each dot equals 50 people

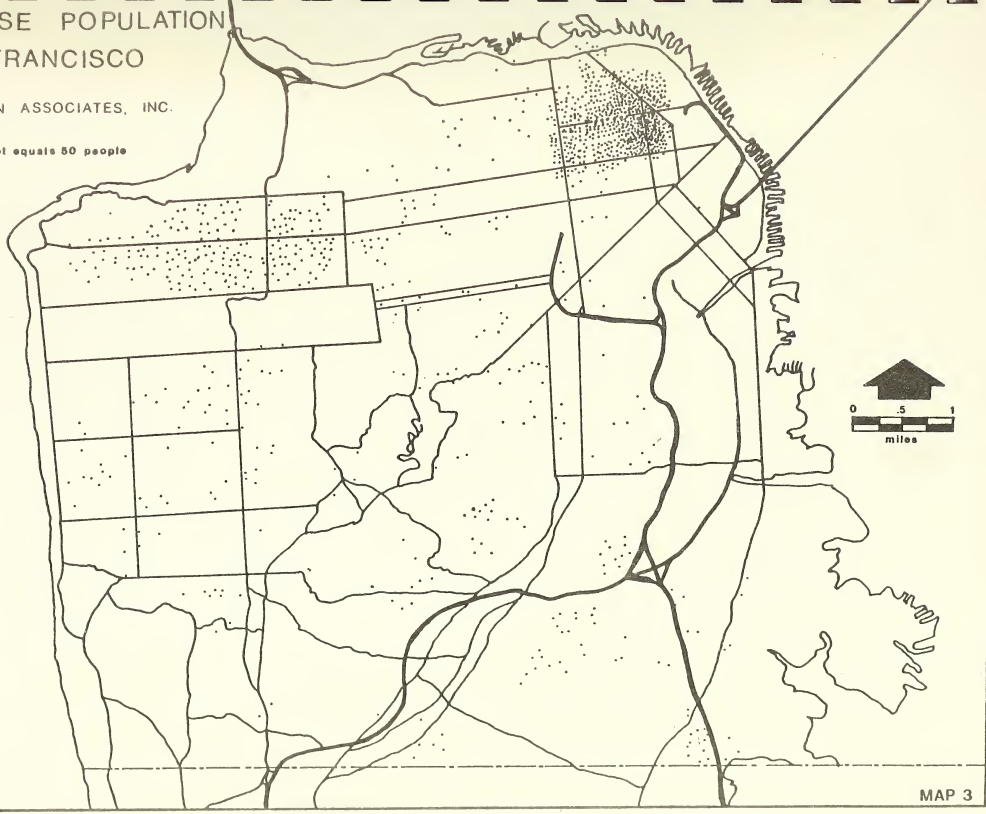
0 .5 miles

MAP 2

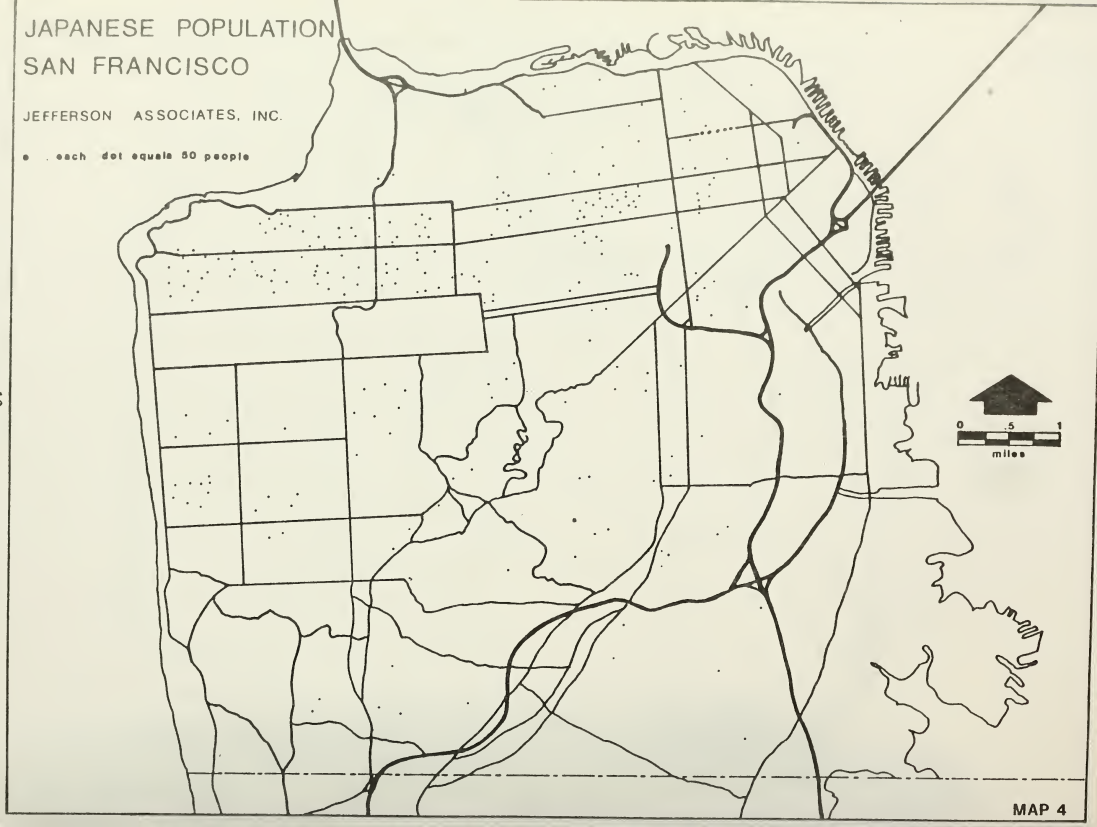
CHINESE POPULATION
SAN FRANCISCO

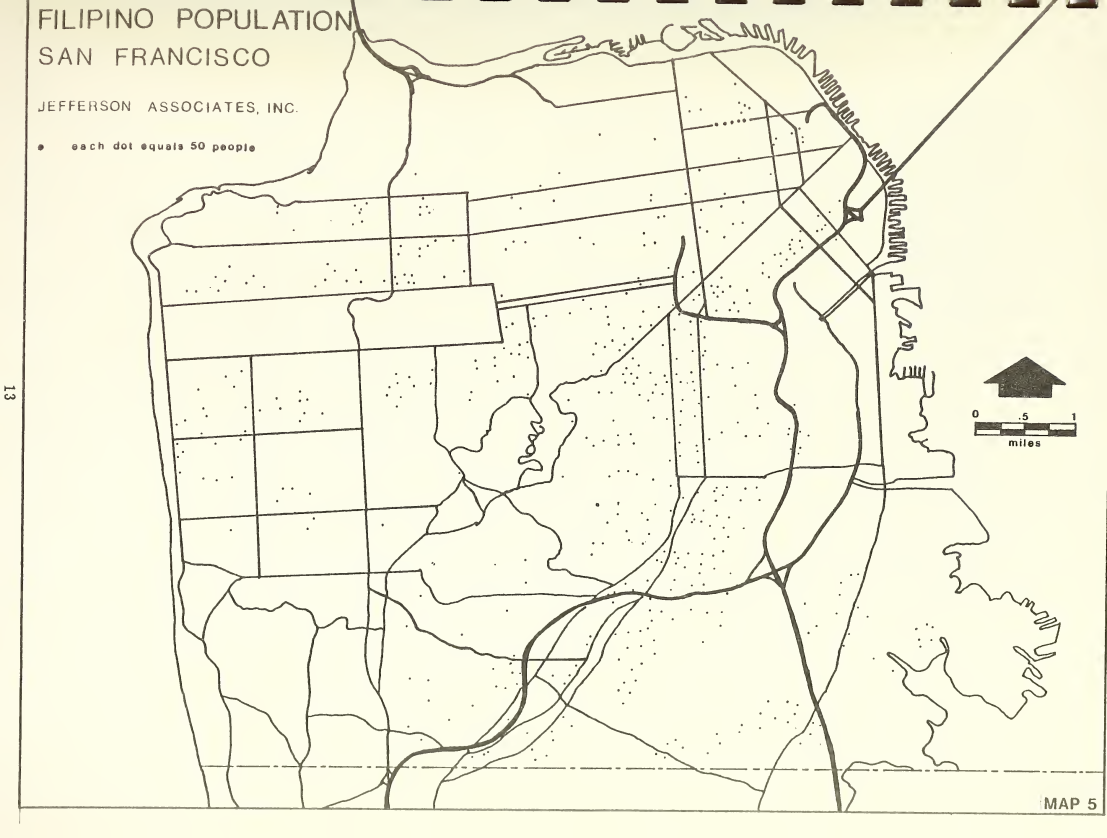
JEFFERSON ASSOCIATES, INC.

• each dot equals 50 people



MAP 3


JAPANESE POPULATION
SAN FRANCISCO
JEFFERSON ASSOCIATES, INC.
• each dot equals 50 people
0 .5 1
miles
MAP 4


FILIPINO POPULATION
SAN FRANCISCO
JEFFERSON ASSOCIATES, INC.
each dot equals 50 people
0 .5 1
miles
MAP 5

community settings in the nine counties as well as numerous informal meetings throughout the region. These meeting sites were selected from a broad base of ethnic, cultural, religious, social, recreational, commerical and political groups using information on SSA and SIG gathered during Phase I. In addition the Phase I maps made it possible to identify population clusters which were targeted as potential meeting areas. Meetings were publicly announced through the media and notices were circulated through sixty-one community based agencies. A list of these meetings and their locations appears in Appendix A of this report.

At these public meetings, minority transportation needs and issues were discussed in open forum. Discussions were chaired by the MCAC county representative, who served as moderator. The county minority dot maps produced during Phase I for that particular county were available for the participants' review and a slide show was used to reveal background information on MTC, the MCAC and the MTNAProject. Discussions centered around the particular needs and transportation concerns unique to the communities in focus, taking into consideration transit dependence, automobile ownership, language barriers, special work schedules, and centers of employment.

After the discussion period the minority transportation needs questionnaire (developed after consultation with members of the MCAC and SSA and SIG from a preliminary matrix) was distributed. The questionnaire asks such questions as the travel modes used for different types of travel (among them, work, medical, social and to attend religious services) and the reasons for the choice of travel mode (Appendix B). Respondents were also asked how MTC could facilitate their travel and to comment on any issues they felt were important. In addition to the community meetings, these questionnaires were disseminated through the various social service and community based agencies in the Region. The number of responses to the questionnaires was 650 for the region. The distribution by county is shown in Table 2.

A series of nine workshops (one for each county) was held toward the end of the Project for the purpose of synthesizing the vast amounts of data and formulating the final recommendations for transit improvements. Workshop participants represented a cross section of interest groups including transit operators, MCAC members, MTC staff, contractor staff and representatives of local community groups such as Calistoga Community Center (Napa County), Latinos Unidos De Sonoma County, La Familia Agency of Marin County, Southside Community Center (Contra Costa County), OCCUR (Alameda County), PROBE Community Center (San Mateo County), Chinatown Neighborhood Improvement Resources Center (San Francisco County), Asian Americans for Community Involvement (Santa Clara County) and the Navy Elks Club of Vallejo (Solano County).

A complete review was made of all the summary data collected and tabulated, such as Phase I maps, transit overlays, projections of locations through 1990 and tabulated questionnaires. The recommendations which resulted from this review process are specific to each county and are summarized in appropriate sections of this report.

Data Sources

The basic data employed to identify and determine the distribution of minorities (Spanish heritage, Black, Chinese, Japanese and Filipino) in the Nine-County Bay Area Region in drawn mainly from the 1970 Census of Population, Census Tract Statistics. These data are supplemented with data on minority distribution available through the Metropolitan Transportation Commission's population print-outs, based on the fourth count of the U.S. Census of Population (1970). In order to improve on the accuracy of the data, information from various planning agencies was also used (Appendix A).

In addition, a rigorous search of the literature on minority populations was conducted in order to determine the history of the minority groups being considered. During this search an effort was made to identify studies which deal with spatial patterns of minority residential locations in the region. This bibliography is available under separate cover, as a second volume of the Phase I MTNAP Final Report.

To further improve the data in order to identify and locate the region's minorities, a concerted effort was made to contact leaders of the various minority communities in order to draw upon their experience, which is vital in identifying small minority population clusters. Central among those consulted on minority locations in the region were the members of the Minority Citizens Advisory Committee, who were asked to develop the cognitive mapping of minority locations.

Since its appointment in March 1975, the MCAC has worked on a variety of issues involving various public firms through which large amounts of data was collected. These public forums were held throughout the San Francisco Bay Region and were attended by hundreds of individuals concerned with transportation-related issues.

II. MINORITIES IN THE SAN FRANCISCO BAY REGION

Early Minority Settlements

The first inhabitants of the area were those Indian nations and their respective tribes indigenous to the region, including: the Miwok Nation (Coast and Lake Tribes); the Costanoan Nation (San Francisco, Saklan, Santa Clara and Santa Cruz tribes); the Wintun Nation (Valley Patwin and Hill Patwin tribes); the Yuki Nation (the Wappo tribe); and the Central southern and southwestern Pomos.

Spanish heritage settlers comprised of Spaniards descendents from Spain and Mexicans from Mexico (Aztec Empire) constituted the next minority group to arrive in the region. Many of the early land grants were deeded to families of Spanish heritage and their influence and culture is evident in every part of the region. The Spaniards and Mexicans during the 1600's and 1700's established many missions and other communities, one of which is Mission Dolores in San Francisco. The region as part of California became a territory of Mexico in the 1820's. At the end of the war between Mexico and the United States, the remaining Mexicans within the boundaries of the region and California became known as Mexican Americans. Today, this group of Mexican Americans as well as Mexican nationals who have migrated in large numbers to the region, make up the largest group within the Spanish heritage population. Puerto Ricans as part of the Spanish heritage population are the next group to have arrived in the region as well as large numbers of Central Americans in the 1960's, and are particularly located in San Francisco.

Nearly 25,000 Chinese arrived in the area during the period 1850 to 1870, with the majority settling in what are now San Francisco's Chinatown, North Beach and China Basin areas. The Japanese were the next minority group to settle in the region. The three significant waves of migration were 1890-1924, 1924-1941 and 1941 to the present. The majority initially settled in San Francisco.

The Black population did not begin migrating to the San Franciso Bay Area in significant numbers until 1940, although Blacks have resided in the region in small numbers since approximately 1850. With the beginning of World War II, Blacks began arriving in large numbers, seeking employment in war industries. The heaviest settlement was in West Oakland, with a smaller cluster in the Hunters Point area of San Francisco.

The last group to arrive in significant numbers was the Filipino population. Initially their migration was to Hawaii in 1906 and they began arriving in the region as early as 1923. More significant numbers arrived in successive years, taking advantage of 1924 legislation granting dual United States-Filipino citizenship. If the current migration trend continues it is believed that by 1980 Filipinos will be the largest Asian group in the region.

Minority Population Clusters

Regionally, the total population for the nine counties is 4,642,588 and the total minority population is 1,201,974 (Table A). Almost 62% of the total population is found in the three counties of Alameda, Santa Clara and San Francisco. These three counties also have the largest minority populations (74%); however, the order changes slightly, with Alameda

ranking first (28.9%), followed by San Francisco (25.2%) and then Santa Clara (20.3%). For both majority and minority populations the greatest numbers are located in the urbanized, industrialized southern counties of Alameda, Contra Costa, San Francisco, San Mateo and Santa Clara. (Tables B & C)

Within the region there are 126 minority population clusters. The southern counties have 81 minority areas identified, compared to 45 found in the northern counties. The total number of minority clusters in the southern counties (where most of the minority population is located) is greater than in the northern counties (with the exception of Solano County, where 22 small clusters are located. (Table 3). Regionally, the distribution of the major minority clusters and a more detailed view of how these clusters are distributed within respective counties is discussed in Chapters IV through XII.

When looking at the ratio of minority to total population the order changes once again. San Francisco has a ratio of 1:1, ranking it first, followed by Alameda County (2:3) and Santa Clara (3:7). Solano County also has a ratio of 3:7 (Table 4). As with total population numbers, the southern counties also have greater minority population/total population ratios.

The regional distribution of the major minority groups being considered in the Project is discussed in the following sections and cluster maps which graphically illustrate the regional distribution and clusters for Spanish heritage, Black, Chinese, Japanese, and Filipino are also included. The distribution of these five groups within respective counties is discussed in Chapters IV through XII.

o Spanish heritage

The Spanish-heritage population is the largest in the region and accounts for almost three-fifths of the region's total minority population. This group is found in every county. The Spanish-heritage population for Santa Clara is 186,525, accounting for almost 32% of the Region's total for this group. Other high concentrations are found in the southern counties of Alameda, Contra Costa, San Francisco and San Mateo. The population, however, is regionally distributed more widely than any of the other minority distributions being considered (Table 5). The distribution of Spanish heritage population clusters in the region is illustrated in the map on page 32.

o Black

Once again, the largest Black populations in the region reside in the five southern counties (93%), as is the case with all five groups. Alameda County has the largest Black population (161,340 or 44% of the Region's total). The next largest Black population for the region is found in San Francisco, where 95,729 Blacks reside in four major clusters, followed by Contra Costa (39,890), San Mateo (25,745), and Santa Clara (18,128). The remaining Black population is concentrated in the northern counties of Solano, Marin, Sonoma and Napa (Table 6). The regional distribution of Black population clusters is illustrated in the map on page 35.

Table A

SAN FRANCISCO BAY AREA REGION

POPULATION (1970)

COUNTY	MINORITY GROUP									TOTAL POPULATION
	SPANISH HERITAGE	BLACK	CHINESE	JAPANESE	FILIPINO	NATIVE AMERICAN	HAWAIIAN	OTHER	TOTAL	
ALAMEDA	135,029 (12.3)	161,340 (14.7)	19,506 (1.8)	10,523 (1.0)	9,587 (.9)	5,688 (.5)	1,487 (.1)	4,684 (.4)	347,844 (31.7)	1,099,017 (100.0)
CONTRA COSTA	51,903 (9.3)	39,890 (7.1)	3,229 (.6)	3,979 (.7)	2,748 (.5)	1,701 (.3)	250 **	1,601 (.3)	105,301 (18.9)	558,489 (100.0)
MARIN	12,021 (5.8)	4,964 (2.4)	1,007 (.5)	1,174 (.6)	465 (.2)	382 (.2)	223 (.1)	531 (.3)	20,767 (10.1)	206,040 (100.0)
NAPA	5,954 (7.5)	507 (.6)	285 (.4)	199 (.3)	186 (.2)	215 (.3)	60 **	194 (.2)	7,600 (9.6)	79,140 (100.0)
SAN FRANCISCO	101,901 (14.4)	95,729 (13.5)	57,757 (8.3)	12,364 (1.7)	25,060 (3.5)	2,900 (.4)	1,374 (.2)	5,199 (.7)	303,284 (42.9)	706,532 (100.0)
SAN MATEO	63,039 (11.3)	25,745 (4.6)	5,051 (.9)	5,609 (1.0)	5,939 (1.1)	1,340 (.2)	644 (.1)	2,483 (.4)	109,850 (19.7)	556,363 (100.0)
SANTA CLARA	186,525 (17.5)	18,128 (1.7)	8,019 (.8)	16,227 (1.5)	6,768 (.6)	4,048 (.4)	816 (.1)	3,489 (.3)	244,020 (22.9)	1,065,957 (100.0)
SOLANO	18,399 (11.1)	16,520 (9.9)	813 (.5)	1,054 (.6)	3,161 (2.0)	1,048 (.6)	377 (.2)	728 (.4)	42,100 (25.3)	166,201 (100.0)
SONOMA	15,200 (7.4)	1,978 (1.0)	373 (.2)	879 (.4)	426 (.2)	1,628 (.8)	184 (.1)	545 (.3)	21,208 (10.4)	204,849 (100.0)
TOTAL FOR REGION	589,971 (12.7)	364,801 (7.9)	97,040 (2.1)	52,008 (1.1)	54,340 (1.2)	18,945 (.4)	5,415 (.1)	19,454 (.4)	1,201,974 (25.9)	4,642,588 (100.0)

*Percentage

**Less than one hundreth of a percent

SOURCE: U.S. Census of Population and U.S. Census Data, 1970-4th Count (Metropolitan Transportation Commission Data System)

Table B

TOTAL POPULATION (1970)

San Francisco Bay Area Region

	Population	Percentage	Rank	Clusters	Average Population Per Cluster
Southern Counties					
Alameda	1,099,017	23.7	1	-	-
Contra Costa	558,489	12.0	4	-	-
San Francisco	706,532	15.2	3	-	-
San Mateo	556,363	12.0	5	-	-
Santa Clara	1,065,957	23.0	2	-	-
5	3,986,358	85.9	-	-	-
Northern Counties					
Marin	206,040	4.4	6	-	-
Napa	79,140	1.7	9	-	-
Solano	166,201	3.6	8	-	-
Sonoma	204,849	4.4	7	-	-
4	656,230	14.1	-	-	-
Region - All Counties					
9	4,642,588	100.0	-	-	-

Table C

TOTAL MINORITY POPULATION (1970)

San Francisco Bay Area Region

	Population	Percentage	Rank	Clusters	Average Population Per Cluster
Southern Counties					
Alameda	347,844	28.9	1	19	18,307
Contra Costa	105.301	8.7	5	18	5,850
San Francisco	303,284	25.2	2	15	20,218
San Mateo	109,850	9.2	4	15	7,323
Santa Clara	244,020	20.3	3	14	17,430
5	1,110,299	92.4	-	81	13,707
Northern Counties					
Marin	20,767	1.7	8	10	2,076
Napa	7,600	.6	9	4	1,900
Solano	42,100	3.5	6	22	2,105
Sonoma	21,208	1.8	7	9	2,356
4	91,675	7.6	-	45	2,131
Region - All Counties					
9	1,201,974	100.0	-	126	9,693

Table 3

NUMBER OF MINORITY POPULATION CLUSTERS (1970)

San Francisco Bay Area Region

	Spanish Heritage	Black	Chinese	Japanese	Filipino	Total
Southern Counties						
Alameda	11	5	1	1	1	19
Contra Costa	9	6	1	1	1	18
San Francisco	4	4	2	2	4	15
San Mateo	6	3	1	1	3	15
Santa Clara	8	1	1	2	2	14
5	38	19	6	7	11	81
Northern Counties						
Marin	4	2	1	2	1	10
Napa	4	0	0	0	0	4
Solano	12	6	1	1	2	22
Sonoma	7	2	0	0	0	9
4	27	10	2	3	3	45
Region - All Counties						
9	65	29	8	10	14	126

Table 4

RATIO OF MINORITY POPULATION TO TOTAL POPULATION

San Francisco Bay Area Region

	Percentage Minority Population	Ratio of Minority Population to Total Population
Southern Counties		
Alameda	31.7	2:3
Contra Costa	18.9	1:3
San Francisco	42.9	1:1
San Mateo	19.7	1:3
Santa Clara	22.9	3:7
5	27.9	2:3
Northern Counties		
Marin	10.1	1:9
Napa	9.6	1:9
Solano	25.3	3:5
Sonoma	10.4	1:9
4	14.0	1:4
Region - All Counties		
9	25.9	3:7

Table 5

SPANISH HERITAGE POPULATION (1970)

San Francisco Bay Area Region

	Population	Percentage	Rank	Clusters	Average Population Per Cluster
Southern Counties					
Alameda	135,029	22.9	2	11	12,275
Contra Costa	51,903	8.8	5	9	5,767
San Francisco	101,901	17.3	3	4	25,475
San Mateo	63,039	10.7	4	6	10,506
Santa Clara	186,525	31.6	1	8	23,315
5	538,397	91.3	-	38	14,168
Northern Counties					
Marin	12,021	2.0	8	4	3,005
Napa	5,954	1.0	9	4	1,488
Solano	18,399	3.1	6	12	1,533
Sonoma	15,200	2.6	7	7	2,171
4	51,574	8.7	-	27	1,910
Region - All Counties					
9	589,971	100.0	-	65	9,076

Table 6

BLACK POPULATION (1970)

San Francisco Bay Area Region

	Population	Percentage	Rank	Clusters	Average Population Per Cluster
Southern Counties					
Alameda	161,340	44.2	1	5	32,268
Contra Costa	39,890	10.9	3	6	6,648
San Francisco	95,729	26.2	2	4	23,932
San Mateo	25,745	7.1	4	3	8,582
Santa Clara	18,128	4.9	5	1	18,128
5	340,832	93.4	-	19	17,939
Northern Counties					
Marin	4,964	1.4	7	2	2,482
Napa	507	*	9	0	-
Solano	16,520	4.5	6	6	2,753
Sonoma	1,978	.5	8	2	989
4	23,969	6.6	-	10	2,397
Region - All Counties					
9	364,801	100.0	-	29	12,579

o Chinese

The major centers of Chinese population are found in San Francisco and Oakland (Alameda County) where 81% of the Region's Chinese reside. The three remaining southern counties (Contra Costa, Santa Clara and San Mateo) have Chinese populations which do not exceed 8,000 each. The total Chinese population for the four northern counties is less than 2,500 (Table 7). The regional distribution of Chinese population clusters is illustrated in the map on page 37.

o Japanese

The largest Japanese population for the region is found in Santa Clara County (16,227), followed by San Francisco (12,364) and Alameda (10,523). The other two Southern counties (San Mateo and Contra Costa) have populations of 5,609 and 3,979 respectively. The four northern counties have a total Japanese population of slightly more than 3,300 (Table 8). The regional distribution of Japanese population clusters is illustrated in the map on page 39.

o Filipino

The five southern counties comprise 92% of the total Filipino population for the region. The largest concentration is in San Francisco (25,060) followed by Alameda (9,587), Santa Clara (6,768), San Mateo (5,939) and Contra Costa (2,748). Of the four northern counties, Solano has the largest Filipino population (3,161); the remaining three counties (Marin, Napa and Sonoma) all have Filipino populations of less than 500 each (see Table 9). The distribution of Filipino population clusters in the region is illustrated on the map on page 41.

o Native American, Hawaiian and "Other" Minorities

Because of lack of data and population size, these three groups were not mapped. Native-Americans represent only four-tenths of one percent of the region's total population. The five southern counties account for 82.6% of the total Native-American population for the region, with the four northern counties making up the other 17.2% (Table 10). Hawaiians make up the region's smallest minority group for which county data is available. The total Hawaiian population for the region is 5,415, with 84.4% residing in the five southern counties and the remaining 15.6% residing in the northern counties. (Table 11). Other minorities is a category which includes all minorities other than those specifically identified in this report. This category numbers about 19,500, with 90% of that total residing in the southern counties (see Table 12).

Table 7

CHINESE POPULATION (1970)

San Francisco Bay Area Region

	Population	Percentage	Rank	Clusters	Average Population Per Cluster
Southern Counties					
Alameda	19,506	20.1	2	1	19,506
Contra Costa	3,229	3.3	5	1	3,229
San Francisco	58,757	60.5	1	2	29,379
San Mateo	5,051	5.2	4	1	5,051
Santa Clara	8,019	8.3	3	1	8,019
5	94,562	97.4	-	6	15,760
Northern Counties					
Marin	1,007	1.0	6	1	1,007
Napa	285	.2	9	0	---
Solano	813	.8	7	1	813
Sonoma	373	.4	8	0	---
4	2,478	2.4	-	2	1,239
Region - All Counties					
9	97,040	100.0	-	8	12,130

Table 8

JAPANESE POPULATION (1970)

San Francisco Bay Area Region

	Population	Percentage	Rank	Clusters	Average Population Per Cluster
Southern Counties					
Alameda	10,523	20.2	3	1	10,523
Contra Costa	3,979	7.7	5	1	3,979
San Francisco	12,364	23.8	2	2	6,182
San Mateo	5,609	10.8	4	1	5,609
Santa Clara	16,227	31.2	1	2	8,114
5	48,702	93.6	-	7	6,957
Northern Counties					
Marin	1,174	2.3	6	2	587
Napa	199	.4	9	0	---
Solano	1,054	2.0	7	1	1,054
Sonoma	879	1.7	8	0	---
4	3,306	6.4	-	3	1,102
Region - All Counties					
9	52,008	100.0	-	10	5,201

Table 9

FILIPINO POPULATION (1970)

San Francisco Bay Area Region

	Population	Percentage	Rank	Clusters	Average Population Per Cluster
Southern Counties					
Alameda	9,587	17.6	2	1	9,587
Contra Costa	2,748	5.1	6	1	2,748
San Francisco	25,060	46.1	1	3	8,353
San Mateo	5,939	10.9	4	4	1,485
Santa Clara	6,768	12.5	3	2	3,384
5	50,102	92.2	-	11	4,555
Northern Counties					
Marin	465	.9	7	1	465
Napa	186	.3	9	0	---
Solano	3,161	6.8	5	0	---
Sonoma	426	.9	8	0	---
4	4,238	8.9	-	1	---
Region - All Counties					
9	54,340	100.0	1	12	4,528

Table 10

NATIVE AMERICAN POPULATION* (1970)

San Francisco Bay Area Region

	Population	Percentage	Rank	Clusters	Average Population Per Cluster
Southern Counties					
Alameda	5,688	30.0	1	-	-
Contra Costa	1,701	8.9	4	-	-
San Francisco	2,900	15.3	3	-	-
San Mateo	1,340	7.0	6	-	-
Santa Clara	4,048	21.4	2	-	-
5	15,677	82.6	-	-	-
Northern Counties					
Marin	382	2.0	8	-	-
Napa	215	1.1	9	-	-
Solano	1,048	5.5	7	-	-
Sonoma	1,623	8.6	5	-	-
4	3,268	17.2	-	-	-
Region - All Counties					
9	18,945	100.0	-	-	-

*American Indian

Source: U.S. Bureau of Census, Census of Population 1970, Detailed Characteristics California, Section 1 and 2, Final Report, P.C. (1)-D6 California.

Table 11

HAWAIIAN POPULATION (1970)

San Francisco Bay Area Region

	Population	Percentage	Rank	Clusters	Average Population Per Cluster
Southern Counties					
Alameda	1,487	27.5	1	-	-
Contra Costa	250	4.6	6	-	-
San Francisco	1,374	25.4	2	-	-
San Mateo	644	11.8	4	-	-
Santa Clara	816	15.1	3	-	-
5	4,571	84.4	-	-	-
Northern Counties					
Marin	223	4.1	7	-	-
Napa	60	1.1	9	-	-
Solano	377	7.0	5	-	-
Sonoma	184	3.4	8	-	-
4	844	15.6	-	-	-
Region - All Counties					
9	5,415	100.0	-	-	-

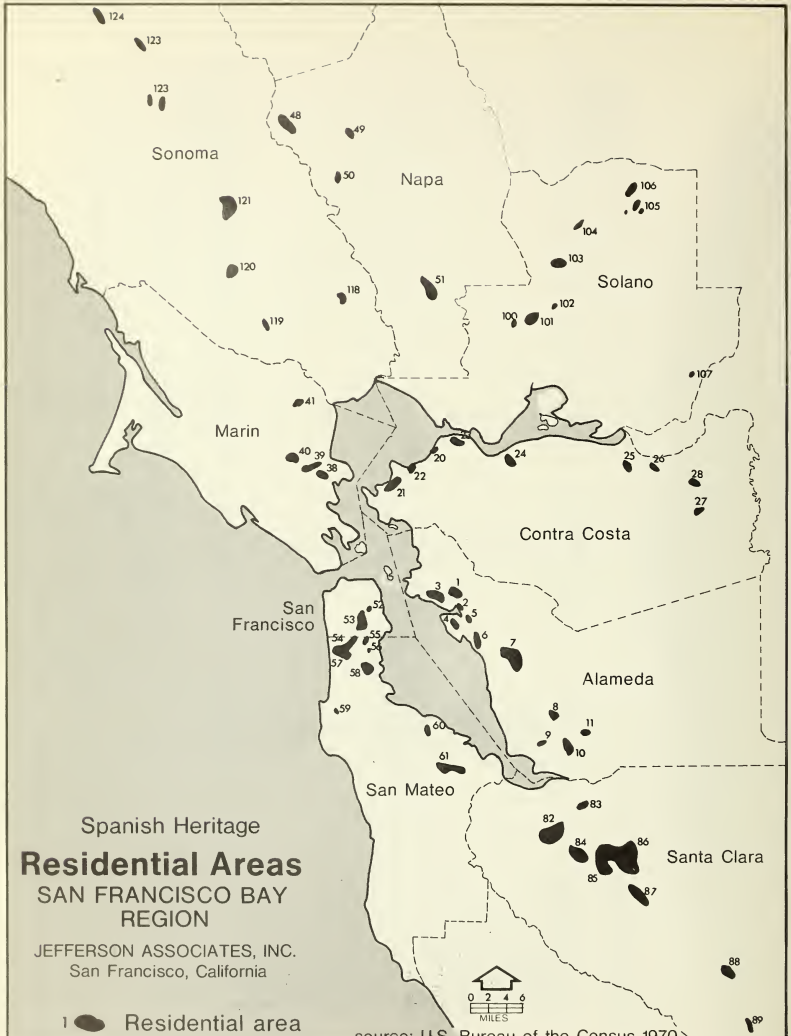
Table 12

OTHER MINORITY POPULATION* (1970)

San Francisco Bay Area Region

	Population	Percentage	Rank	Clusters	Average Population Per Cluster
Southern Counties					
Alameda	4,684	24.1	2		
Contra Costa	1,601	8.2	5	-	-
San Francisco	5,199	26.7	1	-	-
San Mateo	2,483	12.8	4	-	-
Santa Clara	3,489	17.9	3		
5	17,456	89.7	-	-	-
Northern Counties					
Marin	531	2.7	8	-	-
Napa	194	1.0	9	-	-
Solano	728	3.7	6	-	-
Sonoma	545	2.8	7	-	-
4	1,998	10.2	-	-	-
Region - All Counties					
9	19,454	100.0	-	-	-

*Includes all minority groups other than Spanish Heritage, Black, Chinese, Japanese, Filipino, Native American and Hawaiian.



*The numbers appearing on the cluster maps for all five major minority groups correspond with the clusters listed by county, as they appear on the pages following each map.

SPANISH HERITAGE RESIDENTIAL CLUSTERS

Alameda County (11)

1) Fruitvale
2) Kennedy Tract
3) Alameda
4) San Leandro West
5) San Leandro East
6) San Lorenzo
7) Hayward
8) Union City-DeCoto
9) Newark
10) Irvington
11) Fremont

Contra Costa County (9)

20) Rodeo
21) San Pablo-Richmond Annex
22) Hercules
23) Crockett
24) Martinez
25) West Pittsburg
26) Antioch
27) Brentwood
28) Oakley

Marin County (4)

38) San Raphael
39) San Anselmo
40) Fairfax
41) Novato

Napa County (4)

48) Calistoga
49) Angwin
50) St. Helena
51) Napa

San Francisco County (4)

52) South of Market
53) Inner Mission
54) Outer Mission
55) Bay View

San Mateo County (6)

56) Daly City East
57) Daly City West
58) South San Francisco
59) Linda Mar
60) San Mateo
61) Redwood City

Santa Clara County (8)

82) Sunnyvale
83) Alviso
84) Santa Clara
85) East San Jose
86) Berryessa
87) Edenvale-South San Jose
88) Morgan Hill
89) Gilroy

Solano County (12)

96) Benicia
97) East and Central Vallejo
98) West Vallejo
99) North Vallejo-Country Club Crest
100) Rockville-I80
101) Fairfield-Suisun City
102) Travis Air Force Base
103) Vacaville
104) Allendale-Route 505
105) Dixon
106) Dixon-I80
107) Rio Vista

Sonoma County (7)

118) Sonoma
119) Petaluma
120) Rhonert Park-Cotati
121) Santa Rosa
122) Healdsburg
123) Geyserville
124) Cloverdale

Sonoma
Napa
Solano
Marin
Contra Costa
San Francisco
Alameda
San Mateo
Santa Clara
126
125
113
112
111
108
109
110
43
32
33
34
29
30
31
12
13
14
15
16
64
65
62
63
65
68
67
90
Black
Residential Areas
SAN FRANCISCO BAY REGION
JEFFERSON ASSOCIATES, INC.
San Francisco, California
1 Residential area
0 2 4 6
MILES
source: U.S. Bureau of the Census 1970

BLACK RESIDENTIAL CLUSTERS

Alameda County (5)

12) West Berkeley-Emeryville
13) North and West Oakland
14) Fruitvale
15) East Oakland
16) Brookfield Village-Sobrante Park

Contra Costa County (6)

29) Parchester Village
30) Iron Triangle-Southside District
31) Kennedy Park-Richmond Annex
32) North Pittsburg
33) West Pittsburg
34) Central Pittsburg

Marin County (2)

42) Marin City
43) Hamilton Air Force Base

San Francisco County (4)

62) Hunters Point
63) Ingleside
64) Fillmore-Western Addition
65) Potrero

San Mateo County (3)

66) Foster City
67) East Palo Alto
68) Redwood City

Santa Clara County (1)

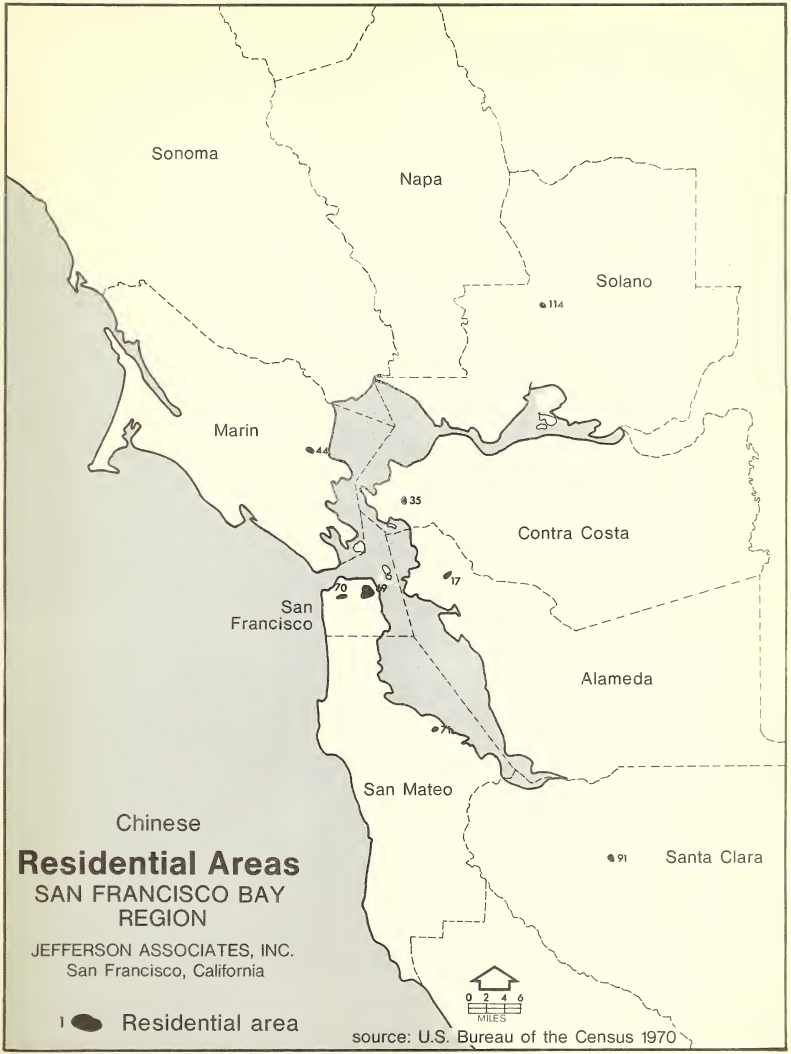
90) Berryessa

Solano County (6)

108) West Vallejo
109) Central Vallejo
110) Southeast Vallejo
111) Country Club Crest-Parview Terrace-Seras Point Road
112) Suisun City-Fairfield
113) Travis Air Force Base

Sonoma County (2)

125) Southeast Santa Rosa
126) Santa Rosa Air Force Base


Sonoma
Napa
Solano
114
Marin
44
35
Contra Costa
17
70
19
San Francisco
Alameda
71
San Mateo
91
Santa Clara
Chinese
Residential Areas
SAN FRANCISCO BAY REGION
JEFFERSON ASSOCIATES, INC.
San Francisco, California
1 Residential area
0 2 4 6
MILES
source: U.S. Bureau of the Census 1970

CHINESE RESIDENTIAL CLUSTERS

Alameda County (1)

17) Oakland Coliseum

Contra Costa County (1)

35) El Cerrito Hills

Marin County (1)

44) North San Raphael

San Francisco County (2)

60) Chinatown
70) Richmond-Sunset

San Mateo County (1)

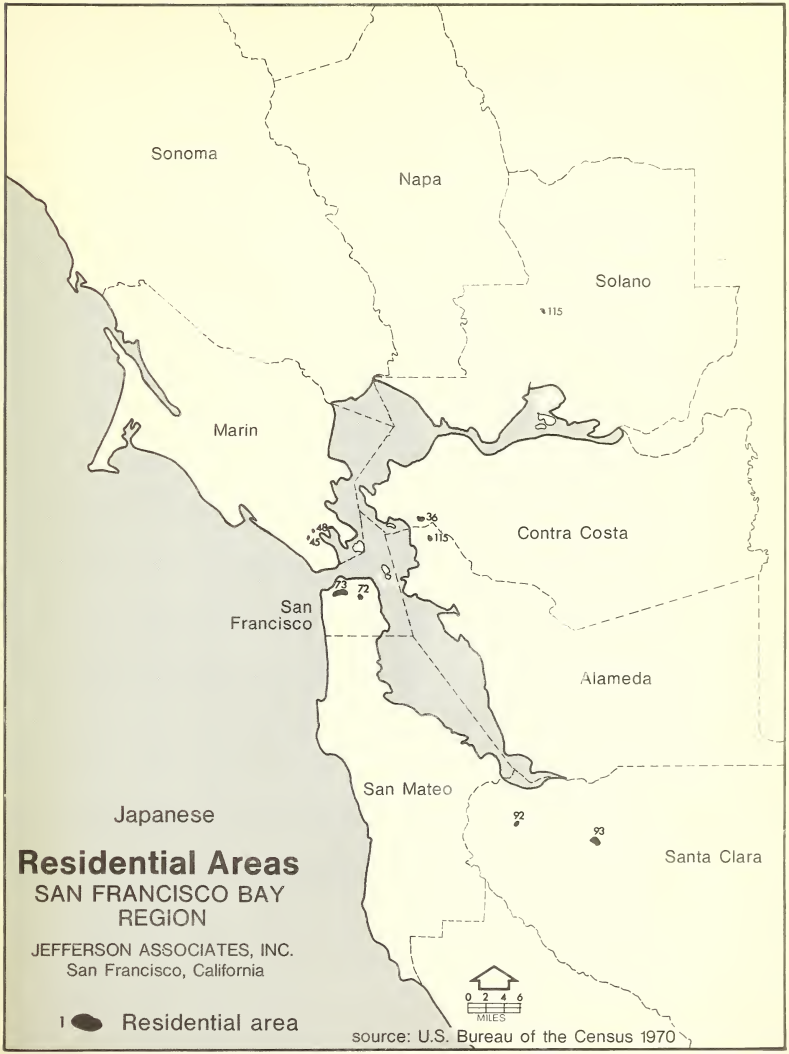
71) San Mateo

Santa Clara County (1)

91) East San Jose

Solano County (1)

114) Fairfield


Sonoma
Napa
Solano
115
Marin
36
48
115
Contra Costa
73
72
San
Francisco
Alameda
San Mateo
92
93
Santa Clara
0 2 4 6
MILES
Japanese
Residential Areas
SAN FRANCISCO BAY
REGION
JEFFERSON ASSOCIATES, INC.
San Francisco, California
1 Residential area
source: U.S. Bureau of the Census 1970

JAPANESE RESIDENTIAL CLUSTERS

Alameda County (1)

18) West Berkeley

Contra Costa County (1)

36) El Cerrito-Richmond Annex

Marin County (2)

45) Tamalpais Valley
46) Mill Valley

San Francisco County (2)

72) Japantown
73) Richmond Sunset

San Mateo County (1)

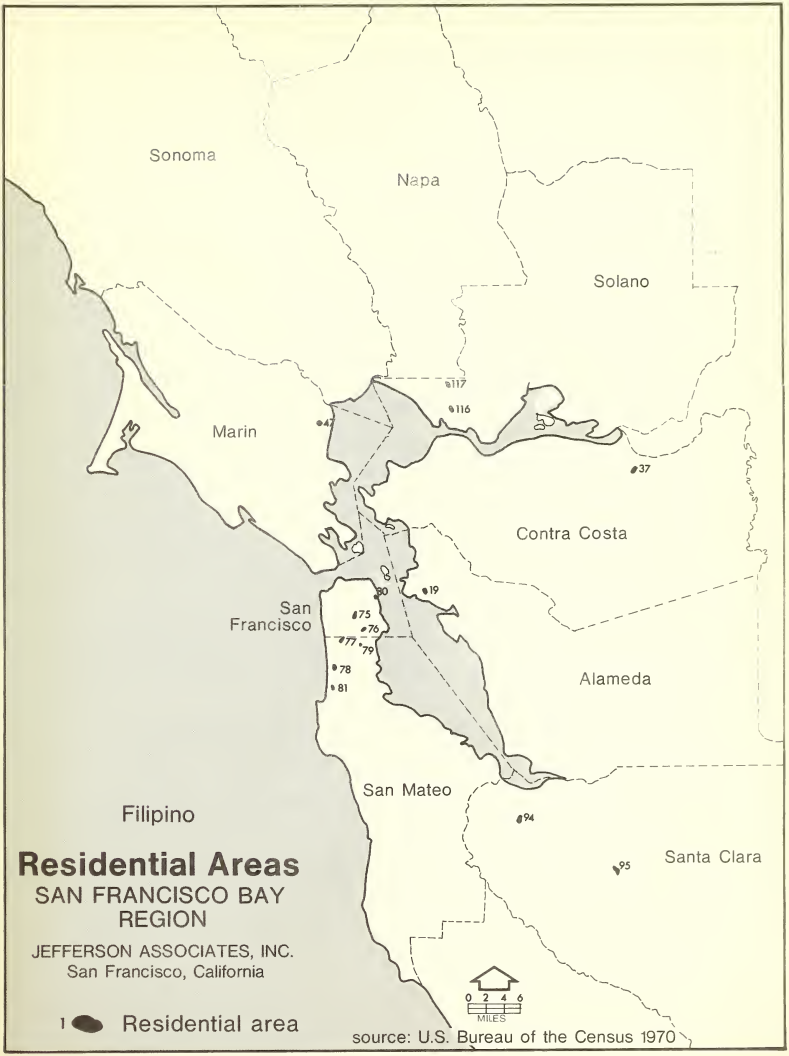
74) San Mateo

Santa Clara County (2)

92) Mountain View
93) Japantown

Solano County (1)

115) Northeast Fairfield


Sonoma
Napa
Solano
Marin
Contra Costa
San Francisco
Alameda
San Mateo
Santa Clara
Filipino
Residential Areas
SAN FRANCISCO BAY REGION
JEFFERSON ASSOCIATES, INC.
San Francisco, California
1 Residential area
0 2 4 6
MILES
source: U.S. Bureau of the Census 1970

FILIPINO RESIDENTIAL CLUSTERS

Alameda County (1)

19) Alameda

Contra Costa County (1)

37) West Pittsburg

Marin County (1)

47) Hamilton Air Force Base

San Francisco County (3)

75) Inner Mission West
76) Inner Mission South
77) Outer Mission

San Mateo County (4)

78) Daly City South
79) Daly City East
80) South of Market
81) Pacifica

Santa Clara County (2)

94) Sunnyvale
95) South San Jose

Solano County (2)

116) North Vallejo
117) Fairfield-Suisun

III. PROJECTIONS OF MINORITY SETTLEMENT PATTERNS 1990

Methods and Techniques

To aid in the long range planning to meet the transportation needs of the San Francisco Region's Minorities, it is necessary to derive extrapolated settlement patterns for minority groups being considered through 1990. In order to project future minority residential patterns in the Bay Region, several factors about contemporary residential patterns have to be considered:

1) The size and shape of the pattern needs to be determined.

2) Significant variations in the topography over which the residential pattern is to expand needs to be considered.

3) The relationship between the minority residential pattern and the topography has to be established.

4) The rate and direction of change in the minority residential pattern has to be determined.

All of these factors are predicated on the assumption that there is a direct relationship between the change in minority residential pattern and the additional area added to the minority distribution pattern over time.

Projection Approach

1) Size and Shape of Residential Patterns

To cartographically extrapolate future minority residential patterns, it it necessary to have mapped minority population density boundaries for at least three points in time. Thus, it is necessary to map the location of selected Bay Area minorities in the years 1950 and 1960 and synthesize this data with the 1970 data. The same procedures employed to identify, locate and map the 1970 distributions will be followed for the years 1950 and 1960.

2) Classification of the Terrain

In order to project future settlement patterns, it is necessary to classify the terrain over which the minority residential expansion is occuring before prediction can be made. This requires that the terrain be classified into several categories stratified by the degree to which the territory can accept population. Not only is it necessary to consider physical constraints to expansion at this juncture, it is also necessary to investigate prevailing social and economic constraints, and how these modify the area's potential to accept minority population. In addition to the criterion to classify terrain it is also necessary to apply ecological theory on city structure and growth and its processes of invasion, succession and dominance in order to facilitate the degree to which terrain impedes or enhances growth processes.

3) The Relationship Between Minority Residential Pattern and Terrain

The relationship between residential pattern and terrain can be determined by observing past and present minority residential density patterns and the relationship of these patterns to terrain classification.

4) Rate and Direction of Change in the Minority Residential Pattern

Rate and direction of change can be determined by measuring the magnitude and direction of expansion by using a time series of minority residential data in terms of density: high (8000 per square mile), medium (4000 per square mile) and low (2000 per square mile). Maps of these density patterns provide the data necessary to determine the direction and rate of change.

Projecting Future Minority Expansions; Cartographic Extrapolation

The time series maps previously mentioned document the sequential movement of the boundary line for each density category from past to present. The advance of the boundary line for a density category can then be extrapolated. This can be accomplished according to the following assumptions and procedure. It must be assumed that future expansion will proceed perpendicular to the tangent of the density boundary line at the beginning period being considered. Vectors should be constructed at even intervals along the density boundary line so that the following formula can be applied:

$b = ak$ where a and b are vectors and k is the constant. The constant $k = \sqrt{D_2/D_1}\ (T_2T_1)$ where the subscripts 1 and 2 indicate respectively earlier and later periods and D is the ratio of additional square miles per hundred thousand minority population added to the metropolitan minority population for a given period. T is the length of the period in years. D is an expression of areal growth, and its square root is extracted, converting it into an expression of linear growth.

By utilizing this formula for each vector by each density category a series of points are generated. When connected, these points form the future density boundary line for the minority group being considered.

When a vector is projected into a location which will not accept population it is treated as surplus and assigned to the vectors nearest to it on both sides which are projected in an area where the potential to accept population is greatest.

The extrapolation procedure described has been used successfully for Minneapolis-St.-Paul, Ann Arbor and Detroit to determine their respective future settlement patterns.

Data and Projections

Due to unavailability of data in a time series from 1950 to 1970 it is not possible to project the 1990 settlement patterns for all five major minority groups identified in 1970. (Projections are made only for Spanish heritage, Black and Asian (Chinese and Japanese). Filipino populations could not be projected because of unavailability of data.

The Spanish-heritage population category in 1970 was inclusive of not only persons of Spanish language, but also other persons of Spanish surname, persons of Spanish mother tongue, and persons of Puerto Rican birth or parentage. Unfortunately the U.S. Bureau of Census has changed definitions of Spanish classification through time. All of these Spanish categories were not reported in 1960 or 1950. Persons of Spanish mother tongue and persons of Puerto Rican birth or parentage were not included in the 1960 and 1950 classification of Spanish Heritage groups. Given the quality of the data available over time, it is necessary to estimate the percentage population change for this group because we know that the data change does not account for the difference in census definitions of the Spanish-heritage population. Since change data are needed to project settlement patterns, it is necessary to reduce the constant by 20% to only partially account for the difference in the quality of data.

In this study, Black population can be easily identified for all years being considered (1950-1960 and 1970) by using the category reported in the U.S. Census of Population as Negro.

Restrictive dates for the Chinese and Japanese populations require that these groups be considered as one (Asian). In 1970 it is possible to determine the Asian population by summing the Chinese and Japanese categories. For 1960 and 1950 it is possible to determine the number of Asians (Chinese and Japanese) at the certainty level. In order to generate small area data it is necessary to factor out the non-white population less Blacks (Negroes) as a surrogate for Asian population. This is not as risky as it might initially be viewed, since Spanish groups were not considered as part of the non-white category. By establishing the correspondents between the non-white less Black category and the other races category by country it is possible to establish the relationship between these categories for 1950 and 1960 (Tables 13 and 14).

Of the population groups patterns being forecast, the Black projections are based on the most reliable data, and Asians are next in order. Spanish heritage is the least reliable data because they were considered as part of the white population prior to 1960 and were not reported as a group until 1970.

The projections of the minority patterns were carried out using the data described. It was not possible to project the Filipino category because the data were not available historically.

With data available working dot maps were compiled for Spanish-heritage, Black and Asian minority groups by county at the scale of 1:62,500. The exception is San Francisco, which is at the scale of 1:1,200 for 1950 and 1960, which matches the 1970 population dot maps produced during Phase I.

To convert these maps into contoured density patterns necessary to project future settlement patterns, it is necessary to cell count. To achieve this a 1/4 of a mile grid was used, creating a cell with an area of 1/16 of square mile. By doing this a population density can be determined for each cell by multiplying the number of dots in the cell by 50 and dividing that product by .0625 square miles. This yields a population density.

With the population density by cell available for each respective minority group it is possible to contour these data. The density categories selected for contouring are

Table 13

CORRESPONDENCE BETWEEN CENSUS CATEGORIES "NON-WHITE/LESS BLACKS" AND "OTHER RACES" SAN FRANCISCO BAY REGION

1950

	Non-White Less Blacks	Other Races	Other Races as a Percentage of Non-White Less Blacks
Alameda	16,042 (2.2)	13,204 (1.8)	82.3
Contra Costa	3,404 (1.1)	2,102 (.7)	61.8
Marin	565 (.7)	388 (.5)	68.7
Napa	450 (1.0)	388 (.8)	86.2
San Francisco	37,967 (4.9)	30,723 (4.0)	80.9
San Mateo	3,063 (1.3)	2,628 (1.1)	85.8
Santa Clara	8,400 (2.9)	6,815 (2.3)	81.1
Solano	2,283 (2.2)	921 (.9)	40.3
Sonoma	1,612 (1.6)	1,390 (1.3)	86.2
TOTAL FOR REGION	73,786 (2.8)	58,559 (2.2)	79.4

Table 14

CORRESPONDENCE BETWEEN CENSUS CATEGORIES "NON-WHITE/LESS BLACKS" AND "OTHER RACES" SAN FRANCISCO BAY REGION

1960

	Non-White Less Blacks	Other Races	Other Races as a Percentage of Non-White Less Blacks
Alameda	27,792 (3.1)	24,481 (3.2)	106.1
Contra Costa	4,848 (1.2)	4,848 (1.2)	100.0
Marin	1,448 (1.0)	1,452 (1.0)	100.3
Napa	ND	723	--
San Francisco	61,530 (8.3)	61,530 (8.3)	100.0
San Mateo	8,328 (1.9)	8,328 (1.9)	100.0
Santa Clara	16,503 (2.6)	16,503 (2.6)	
Solano	3,993 (3.0)	5,405 (4.0)	135.3
Sonoma	ND	2,377 (1.6)	--
TOTAL FOR REGION	127,543 (3.5)	130,647 (3.6)	102.4

respectively 2000, 4000, 8000, 16,000, 32,000 and 64,000 per square mile. These are the contours that appear on the maps for each minority group for 1950, 1960 and 1970. For any of these density contours to appear on the 1990 maps showing the projected pattern it is necessary for the category to appear in the three earlier periods.

The projection process is three-staged. First, requiring 81 population dot maps, secondly, 81 maps consisting of cell counts, and thirdly, 50 population density contour maps. When densities were lower than 2000 per square mile no contoured map was compiled. With the contour maps the 1990 settlement patterns were projected. Tables 15 & 16 indicate projections by minority group, density, category and county.

The information on these tables clearly indicates that the projection procedure used in this study is stringent in the high density southern counties where it was possible to project the settlement patterns of all three minority groups at least at a level of 2000 people per square mile.

In northern counties, which are categorized by low density, it is only possible to project 1990 settlement patterns for the respective Spanish-heritage and Black groups in 1990 and Blacks in Solano County. This is not to suggest that comment cannot be made on future minority settlement patterns in these counties. It only indicates that minority population densities in these counties in 1950-1970 were less than 2000 people per square mile, the lower limit established for projections in this study.

Population Forecast

At this juncture, before a discussion of the projected regional patterns, it is necessary to briefly discuss the changed character of the Region's minority population during the period 1950 to 1990. In order to discuss the 1990 population it is necessary to forecast the Bay Area minority population for two cases. The "Provisional Series 3 Projection" published by the Association of Bay Area Government is used.

The assumptions underlying both cases are summarized in the figures which were extracted from the ABAG "Series 3 Projection", pages 7 and 8. Under these assumptions age, cohorts, birth rates, death rates, rates of migration and natural increase are considered.

Based upon the assumption outlined in Figures 1 and 2 a series of average annual percentage growth rates were generated by ABAG for both cases (1 and 2), by county as well as for the regional totals (Table 17).

These annual growth rates were applied to the total population and minority population by county, starting with the 1970 population for all counties except San Francisco. For San Francisco, the only county forecasted to lose population, the Series 3 Projections were used for the total population. For San Francisco's minority groups the regional growth rates were also used for the Napa County Area 2 forecast.

Following this procedure Minority populations for the San Francisco Bay Region were forecast. The total population is forecast to be between 5,190,137 and 5,605,323 by 1990. By that time the region's largest group (Spanish heritage) will be in range of 722,605 and 796,783. Regionally, Blacks will range between 411,234 and 446,497 by 1990 and Asians

Table 15

PROJECTION CONSTANTS 1990
SAN FRANCISCO BAY REGION
SOUTHERN COUNTIES

Density Level	Spanish heritage	Black	Asian
ALAMEDA			
8000	- -	.63	-
4000	(7.24)* 1.45	.15	.37
2000	(6.89)* 1.38	.60	1.05
CONTRA COSTA			
8000	- -	.73	-
4000	(9.55)* 1.91	1.00	-
2000	(9.58)* 1.92	.95	.86
SAN FRANCISCO			
8000	- -	.79	.55
4000	(4.31)* .86	.60	2.71
2000	(1.31)* .26	.79	.61
SAN MATEO			
8000	- -	-	-
4000	- -	.82	.03
2000	(7.57)* 1.51	.64	.34
SANTA CLARA			
8000	- -	-	-
4000	(.63)* .13	-	-
2000	(.26)* .05	1.84	1.07

*Spanish heritage constant is reduced by 20% of its value
(See explanation on pages 44-45.)

Table 16

PROJECTION CONSTANTS 1990
SAN FRANCISCO BAY REGION
NORTHERN COUNTIES

Density Level	Spanish heritage	Black	Asian
MARIN			
8000	- -	.01	-
4000	(2.16)* .43	.13	-
2000	(1.53)* .31	.05	-
NAPA			
8000	- -	-	-
4000	- -	-	-
2000	- -	-	-
SOLANO			
8000	- -	-	-
4000	- -	2.21	-
2000	- -	1.80	-
SONOMA			
8000	- -	-	-
4000	- -	-	-
2000	- -	-	-

*The Spanish heritage constant is reduced by 20% of its value (See explanation on pages 44-45.)

Table 17

ANNUAL POPULATION GROWTH RATE INCREMENT
SAN FRANCISCO BAY REGION
1975-1990
(Percentage)

County	Case 1	Case 2
Alameda	.5	.4
Contra Costa	1.9	2.2
Marin	1.0	0.6
Napa	1.3	0.0
San Francisco	-0.3	-0.3
San Mateo	0.3	0.2
Santa Clara	1.0	1.0
Solano	4.2	1.3
Sonoma	2.3	0.9
Regional Total	1.0	0.6

Source: ABAG "Provisional Series 3 Projections" March 2, 1977; Page 6

will be in the range of 169,261 and 180,278. (Table 18)

In comparing the total population forecast, following the procedure used here and the ABAG projections, there is only a 16.6 thousand difference in Case 1 and approximately 83.6 thousand in Case 2 (Table 19). This difference is attributed to the fact that ABAG based its 1990 forecast on 1975 data whereas the MTNAP forecast used 1970 as the base data year. Following is a series of tables showing the 1950, 1960 and 1970 minority populations and change between periods (Tables 20 through 25).

The following is a series of twelve regional maps showing the evolution of the Spanish-heritage, Black and Asian minority group settlement patterns for the years 1950, 1960, 1970 and the projected patterns for 1990. A detailed discussion of this pattern will be pursued under the county headings. (Maps 11-22).

Table 18

SAN FRANCISCO BAY REGION POPULATION 1990

Forecast - (Case 1)

COUNTY	MINORITY GROUP			TOTAL POPULATION
	Spanish Heritage	Black	Asian	
Alameda	213,053	174,643	32,508	1,189,634
Contra Costa	114,119	58,122	10,508	813,752
Marin	21,840	6,056	2,661	251,398
Napa	9,935	656	626	102,458
San Francisco	193,993	116,803	86,778	641,900
San Mateo	101,442	27,334	11,318	590,708
Santa Clara	319,747	22,119	29,585	1,300,660
Solano	60,557	37,513	4,239	377,402
Sonoma	38,452	3,257	2,061	337,311
TOTAL FOR REGION	1,073,138	446,497	180,278	5,605,323

Forecast - (Case 2)

COUNTY	MINORITY GROUP			TOTAL POPULATION
	Spanish Heritage	Black	Asian	
Alameda	213,359	174,894	32,555	1,191,345
Contra Costa	97,476	49,645	8,971	695,074
Marin	20,174	5,595	2,458	232,218
Napa	8,649	571	545	90,300
San Francisco	179,192	107,892	80,157	645,100
San Mateo	99,438	26,794	11,094	579,034
Santa Clara	319,747	22,119	29,585	1,300,660
Solano	34,527	21,388	2,417	215,178
Sonoma	26,398	2,336	1,479	241,928
TOTAL FOR REGION	998,968	411,234	169,261	5,190,137

Source: 1/ Used positive regional constant.

Table 19

SAN FRANCISCO BAY REGION POPULATION FORECAST 1990

COUNTY	1975	1990 Case 1	1990 Case 2
Alameda	1089.9	1180.3	1163.4
Contra Costa	582.8	774.3	690.5
Marin	216.1	251.9	237.2
Napa	90.0	109.0	90.3
San Francisco	672.6	641.9	654.1
San Mateo	576.4	606.1	597.0
Santa Clara	1169.7	1367.0	1352.0
Solano	186.3	345.6	227.5
Sonoma	245.4	345.9	280.6
REGION	4829.2	5621,9	5283.7

Source: ABAG "Provisional Series 3 Projectoins" March 2, 1977; page 6.

Table 20

SAN FRANCISCO BAY REGION POPULATION 1950

COUNTY	MINORITY GROUP			TOTAL POPULATION
	Spanish Heritage	Black	Asian	
Alameda	5,223 (.7)*	69,442 (9.4)	12,694 (1.7)	740,315 (100.0)
Contra Costa	2,685 (.9)	22,023 (7.4)	1,855 (.6)	298,984 (100.0)
Marin	426 (.5)	4,257 (5.0)	306 (.4)	85,619 (100.0)
Napa	262 (.6)	408 (.9)	345 (.7)	46,603 (100.0)
San Francisco	12,478 (1.6)	43,502 (5.6)	30,392 (3.9)	775,357 (100.0)
San Mateo	1,392 (.6)	2,395 (1.0)	2,574 (1.1)	235,659 (100.0)
Santa Clara	4,959 (1.8)	1,718 (.6)	6,671 (2.3)	290,547 (100.0)
Solano	798 (.8)	6,604 (6.3)	837 (.8)	104,833 (100.0)
Sonoma	419 (.4)	460 (.4)	805 (.8)	103,405 (100.0)
TOTAL FOR REGION	28,648 (1.2)	150,809 (5.6)	56,479 (2.1)	2,681,322 (100.0)

*Percentage

1/ Foreign born (Mexico and other Americans less Canada)

2/ Includes Chinese and Japanese

Source: U.S. Census of Population 1950

Table 21

SAN FRANCISCO BAY REGION POPULATION CHANGE 1950–1960

COUNTY	MINORITY GROUP			TOTAL POPULATION
	Spanish Heritage	Black	Asian	
Alameda	70,806	41,978	9,069	167,894
Contra Costa	31,873	3,271	1,037	110,046
Marin	6,426	-187	666	61,201
Napa	641	144	76	19,287
San Francisco	56,075	30,861	15,517	-35,041
San Mateo	24,165	8,451	3,428	208,730
Santa Clara	104,629	2,469	6,155	351,768
Solano	8,888	6,137	759	29,764
Sonoma	1,479	458	260	43,970
TOTAL FOR REGION	304,976	93,582	36,967	967,619

Table 22

SAN FRANCISCO BAY REGION POPULATION 1960

COUNTY	MINORITY GROUP			TOTAL POPULATION
	Spanish Heritage	Black	Asian	
Alameda	76,029 (8.4)*	111,420 (12.3)	21,763 (2.4)	908,209 (100.0)
Contra Costa	34,558 (8.4)	25,294 (6.2)	2,892 (.7)	409,030 (100.0)
Marin	6,852 (4.7)	4,070 (2.8)	972 (.7)	146,820 (100.0)
Napa	903 (1.4)	552 (.8)	421 (.6)	65,890 (100.0)
San Francisco	68,553 (9.3)	74,363 (10.0)	34,909 (6.2)	740,316 (100.0)
San Mateo	25,557 (5.8)	10,846 (2.4)	6,002 (1.4)	444,389 (100.0)
Santa Clara	109,588 (17.1)	4,187 (.7)	12,826 (2.0)	642,315 (100.0)
Solano	9,686 (7.2)	12,741 (9.5)	1,596 (1.9)	134,597 (100.0)
Sonoma	1,898 (1.3)	918 (.6)	1,065 (.7)	147,375 (100.0)
TOTAL FOR REGION	333,624 (9.1)	244,391 (6.7)	93,446 (2.6)	3,648,941 (100.0)

*Percentage

1/ Foreign stock (Mexico and other Americans less Canada)

2/ Includes Chinese and Japanese

Source: U.S. Census of Population 1960

Table 23

SAN FRANCISCO BAY REGION POPULATION CHANGE 1960-70

COUNTY	MINORITY GROUP			TOTAL POPULATION
	Spanish Heritage	Black	Asian	
Alameda	59,000	49,920	8,269	190,808
Contra Costa	17,345	14,596	4,316	149,459
Marin	5,169	894	1,209	59,220
Napa	5,051	-45	63	13,250
San Francisco	33,348	21,366	25,212	-33,784
San Mateo	37,482	14,899	4,658	111,974
Santa Clara	76,947	13,941	11,420	423,642
Solano	8,713	3,779	271	31,604
Sonoma	13,302	1,060	187	57,474
TOTAL FOR REGION	787,357	120,410	55,602	993,647

Table 24

SAN FRANCISCO BAY REGION POPULATION 1970

COUNTY	MINORITY GROUP			TOTAL POPULATION
	Spanish Heritage	Black	Asian	
Alameda	135,029 (12.3)*	161,340 (14.7)	30,032 (2.7)	1,099,017 (100.0)
Contra Costa	51,903 (9.3)	39,890 (7.1)	7,208 (1.3)	558,489 (100.0)
Marin	12,021 (5.8)	4,964 (2.4)	2,181 (1.1)	206,040 (100.0)
Napa	5,954 (7.5)	507 (.6)	484 (.6)	79,140 (100.0)
San Francisco	101,901 (14.4)	95,729 (13.5)	71,121 (10.1)	706,532 (100.0)
San Mateo	63,039 (11.3)	25,745 (4.6)	10,660 (1.9)	556,363 (100.0)
Santa Clara	186,525 (17.5)	18,128 (1.7)	29,246 (2.3)	1,065,957 (100.0)
Solano	18,399 (11.1)	16,520 (9.9)	1,867 (1.1)	166,201 (100.0)
Sonoma	15,200 (7.4)	1,978 (1.0)	1,252 (.6)	204,849 (100.0)
TOTAL FOR REGION	589,971 (12.7)	364,801 (7.9)	149,048 (3.2)	4,642,588 (100.0)

*Percentage

1/ Includes Chinese and Japanese

Source: U.S. Census of Population 1970 and U.S. Census Data 1970 - 4th Count (MTC Data System)

Table 25

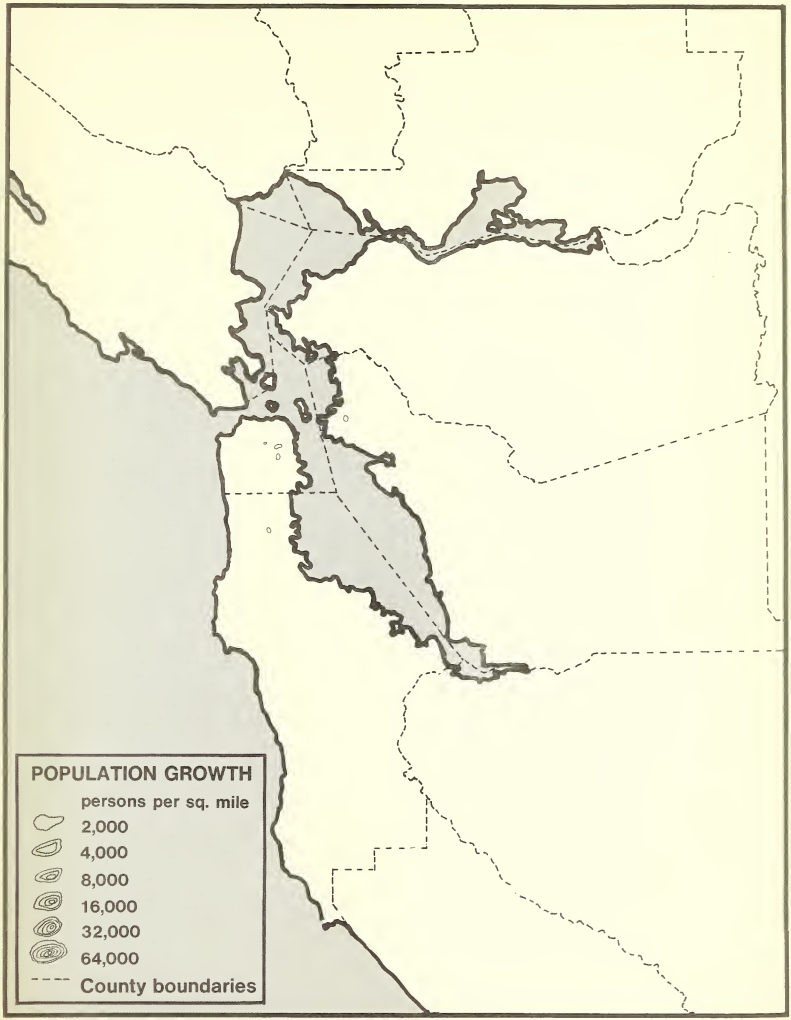
SAN FRANCISCO BAY REGION POPULATION CHANGE 1970–90

Forecast (Case 1)

COUNTY	MINORITY GROUP			TOTAL POPULATION
	Spanish Heritage	Black	Asian	
Alameda	16,229	13,303	2,416	90,617
Contra Costa	35,797	18,232	3,294	255,263
Marin	3,940	1,092	520	45,358
Napa	2,261	149	142	23,327
San Francisco	35,001	21,074	15,657	-64,632
San Mateo	5,897	1,589	658	34,345
Santa Clara	57,698	3,991	5,339	234,703
Solano	33,889	19,193	2,372	211,201
Sonoma	16,100	1,297	809	132,462
TOTAL FOR REGION	206,812	81,696	31,230	862,735

Forecast (Case 2)

COUNTY	MINORITY GROUP			TOTAL POPULATION
	Spanish Heritage	Black	Asian	
Alameda	16,535	13,552	2,523	92,328
Contra Costa	19,154	9,755	1,763	136,585
Marin	2,274	631	277	26,178
Napa	975	64	61	11,160
San Francisco	20,200	12,163	9,036	-61,432
San Mateo	3,893	1,049	434	22,671
Santa Clara	57,698	3,991	5,339	234,703
Solano	7,859	4,868	550	48,977
Sonoma	4,046	358	227	37,079
TOTAL FOR REGION	132,642	46,433	20,213	547,549



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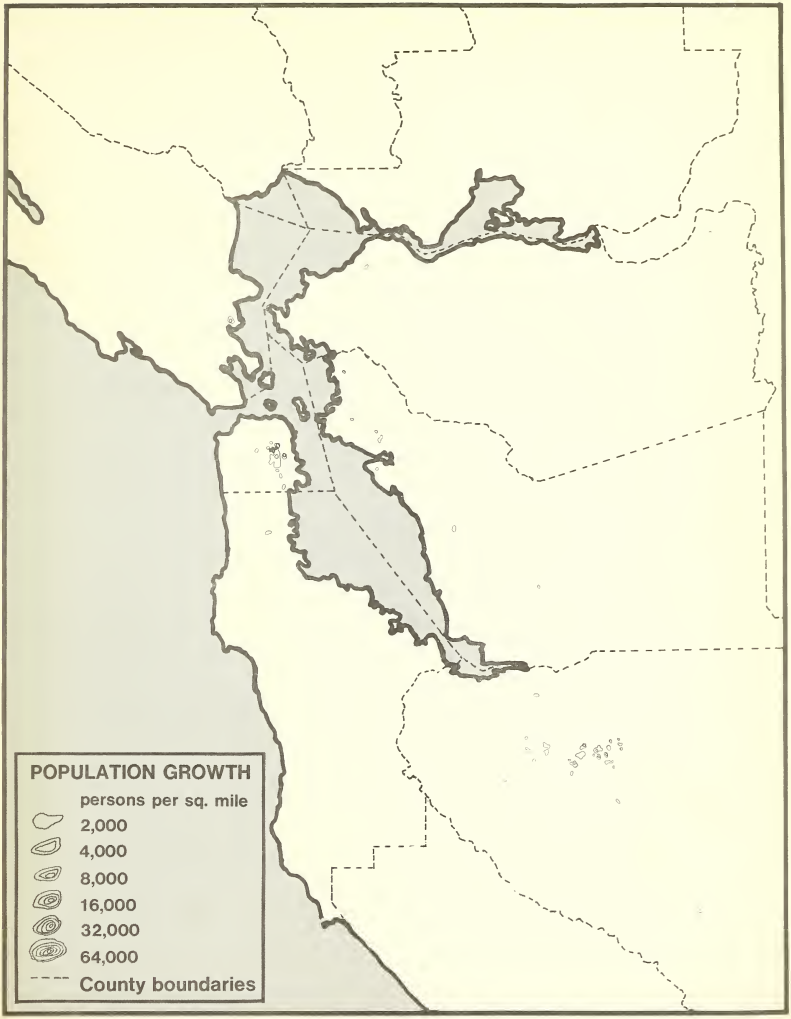

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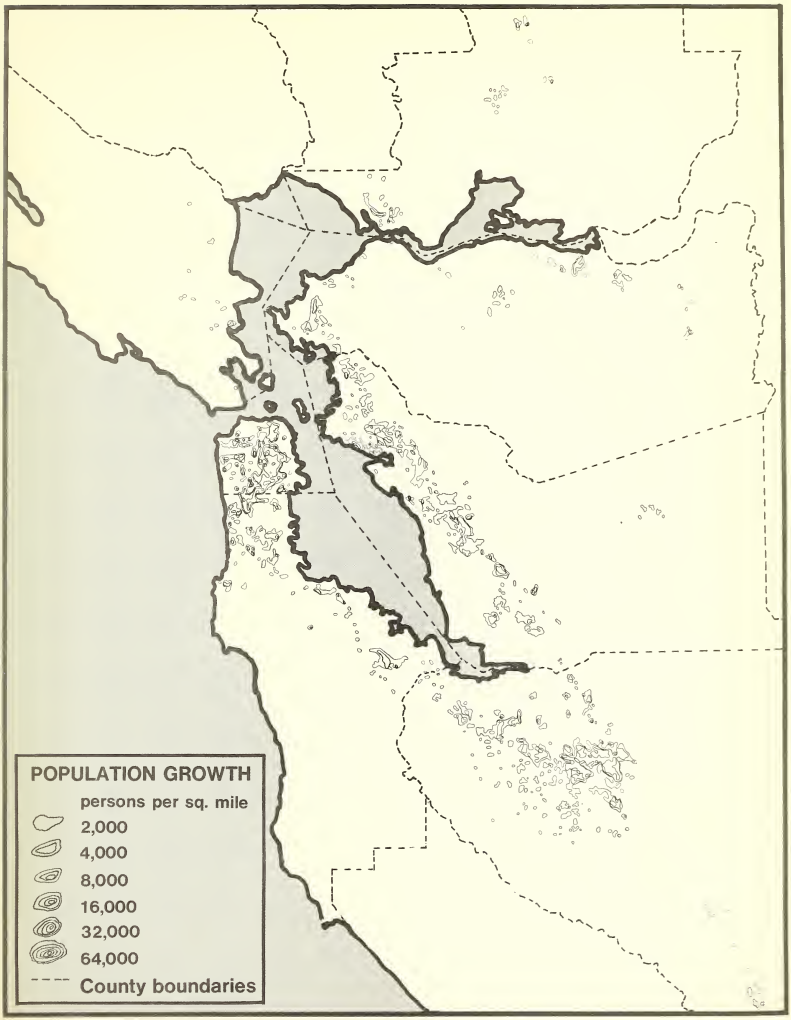

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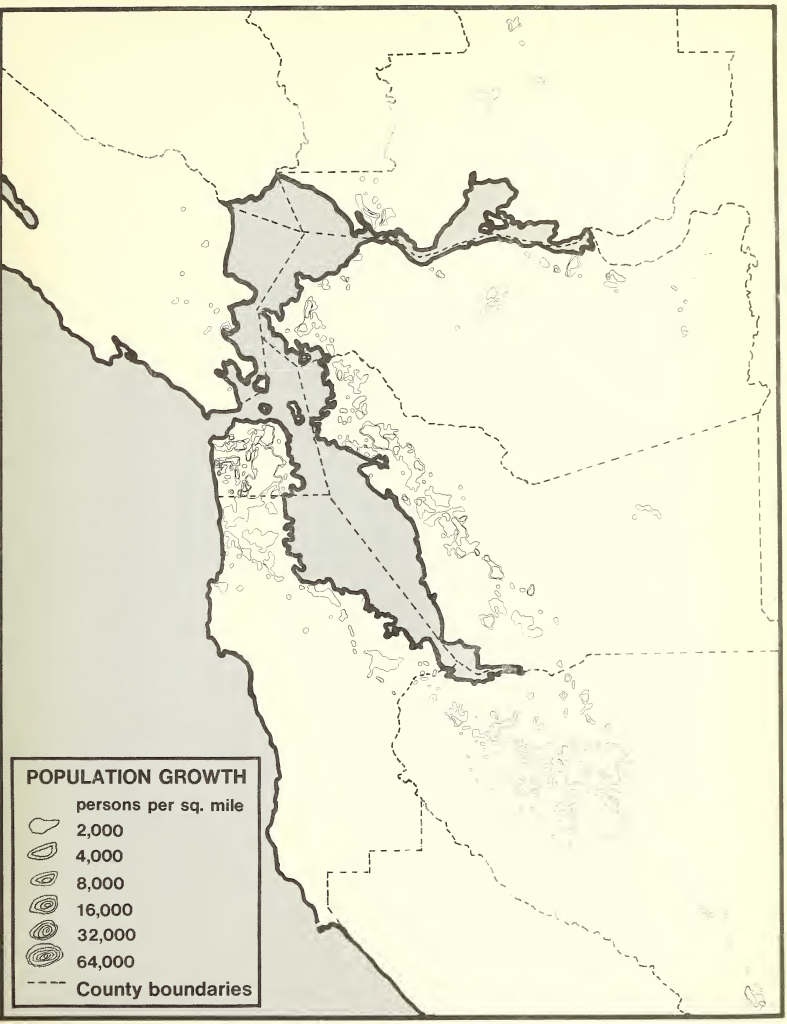

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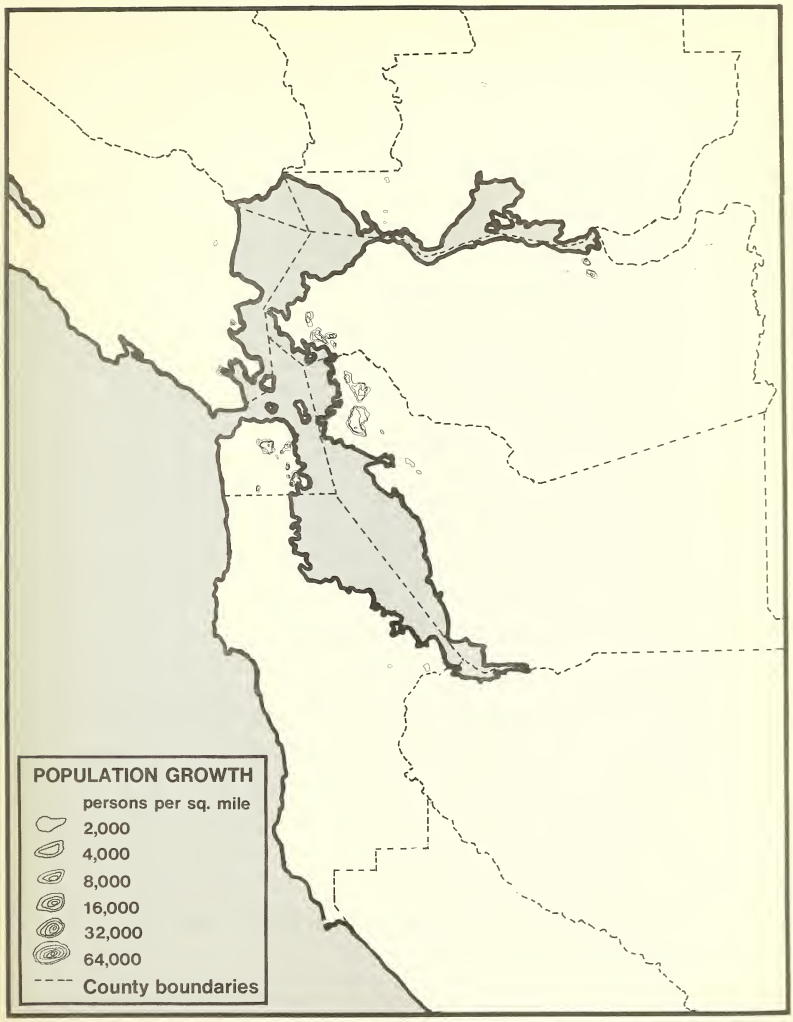
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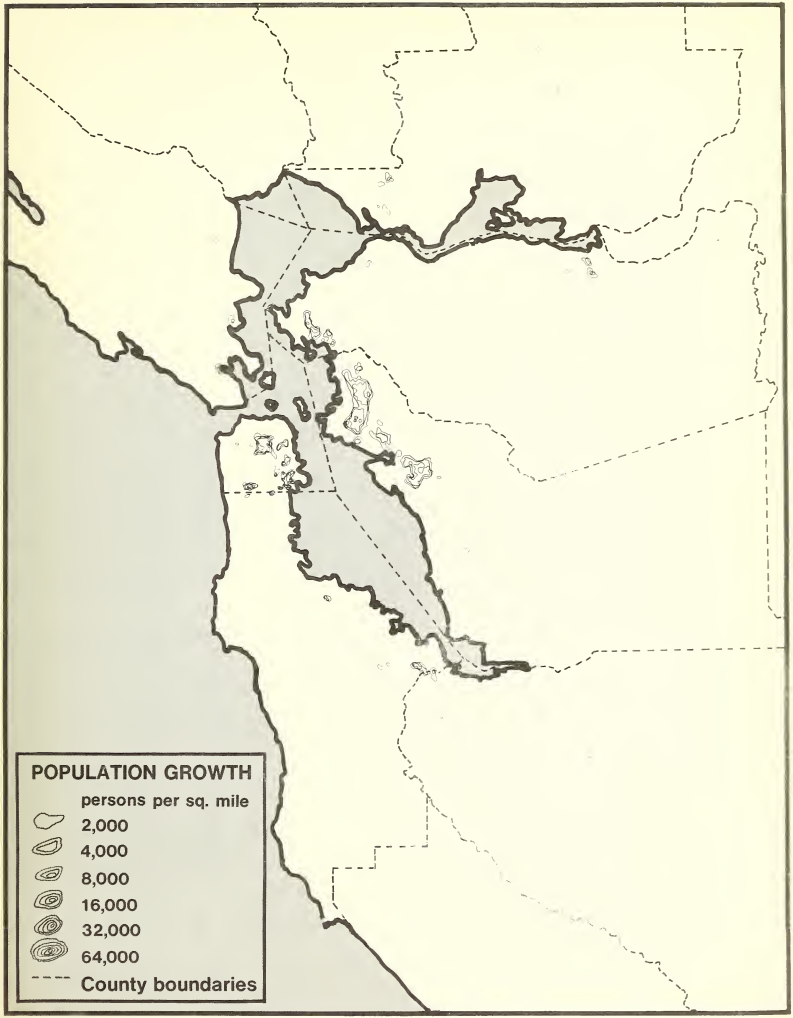
4,000
8,000
16,000
32,000
64,000
County boundaries

BLACK 1950


POPULATION GROWTH
persons per sq. mile
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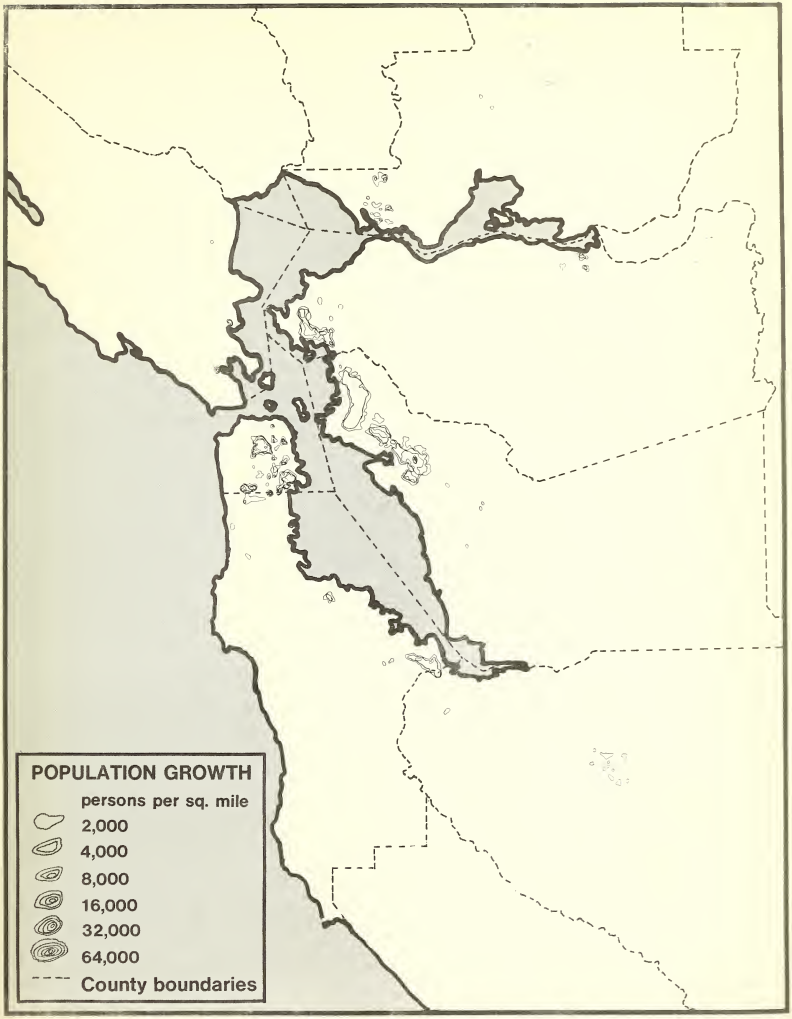
4,000
8,000
16,000
32,000
64,000
County boundaries


POPULATION GROWTH
persons per sq. mile
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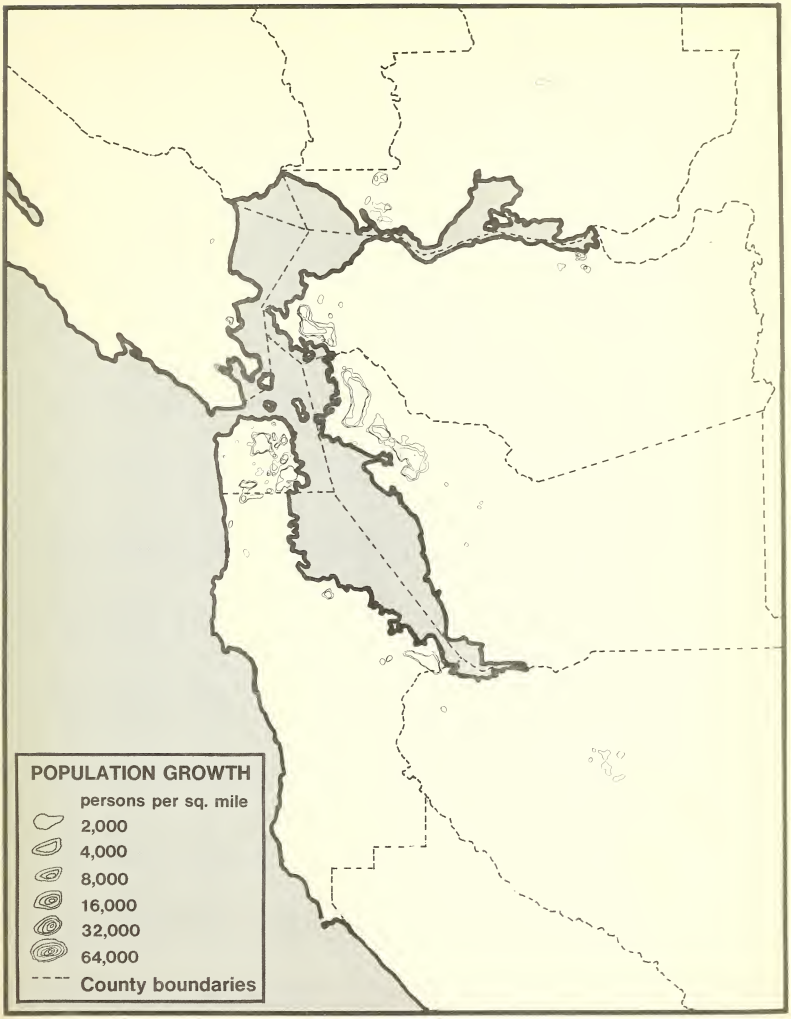
32,000
64,000
County boundaries

BLACK 1970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persons per sq. mile
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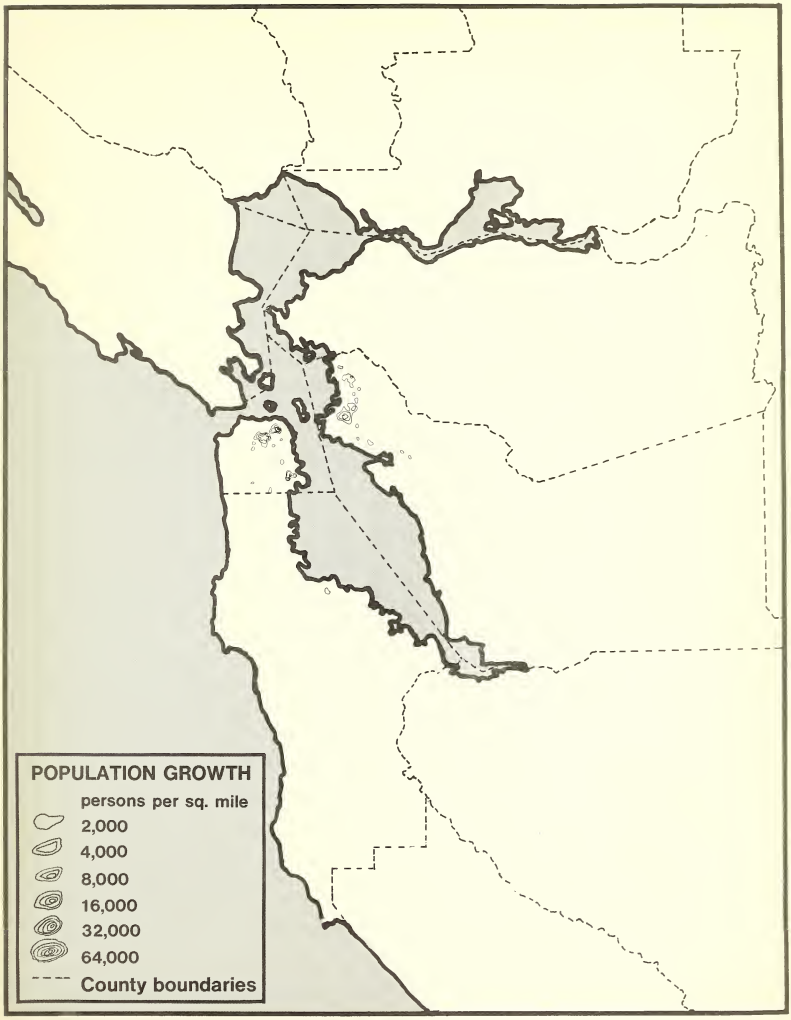
16,000
32,000
64,000
County boundaries

BLACK 1990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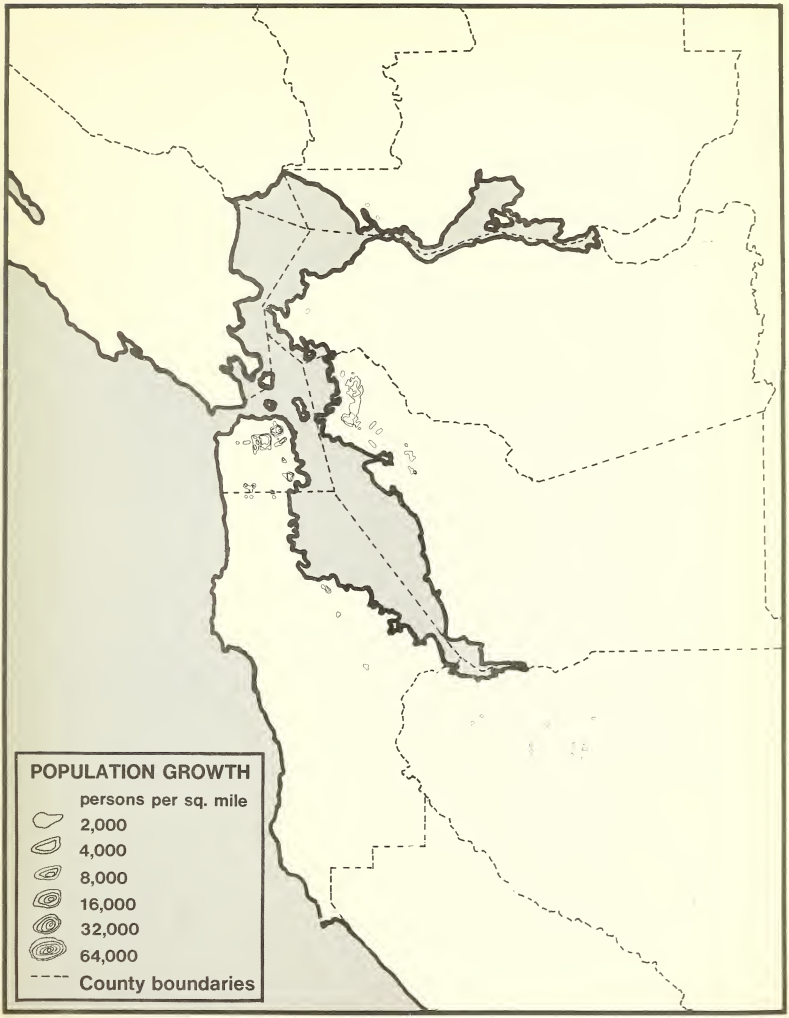
persons per sq. mile
2,000
4,000
8,000
16,000
32,000
64,000
County boundaries

ASIAN 1950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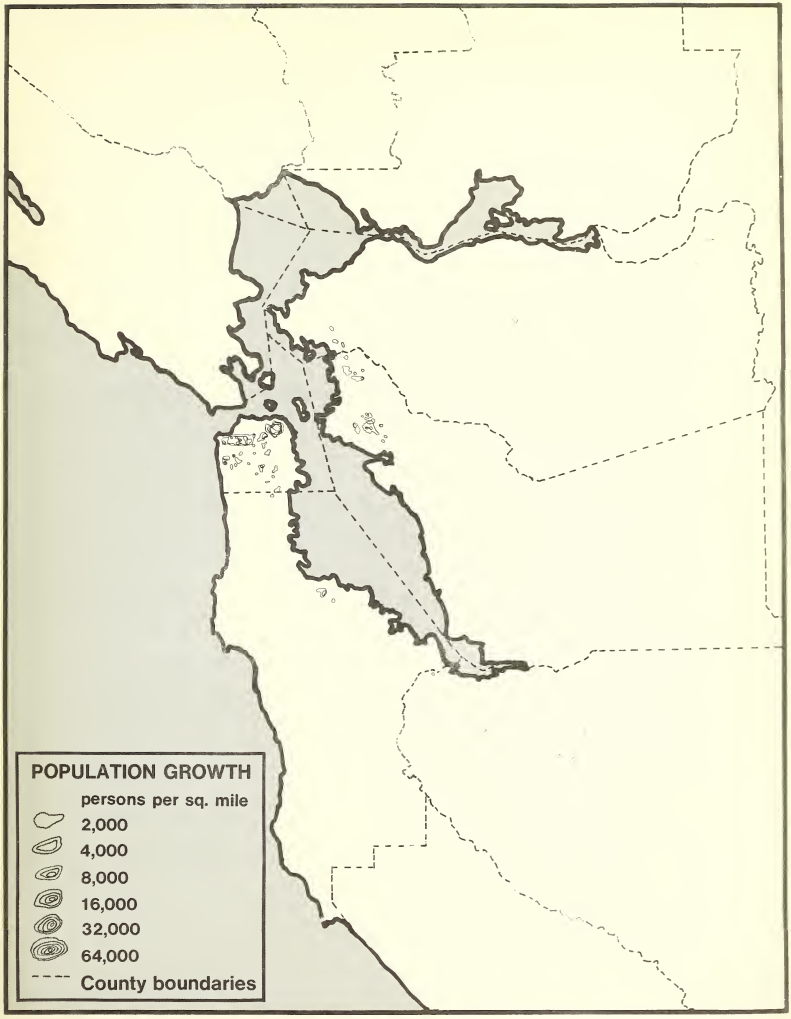
persons per sq. mile
2,000
4,000
8,000
16,000
32,000
64,000
County boundaries

ASIAN 1960


POPULATION GROWTH
persons per sq. mile
2,000
4,000
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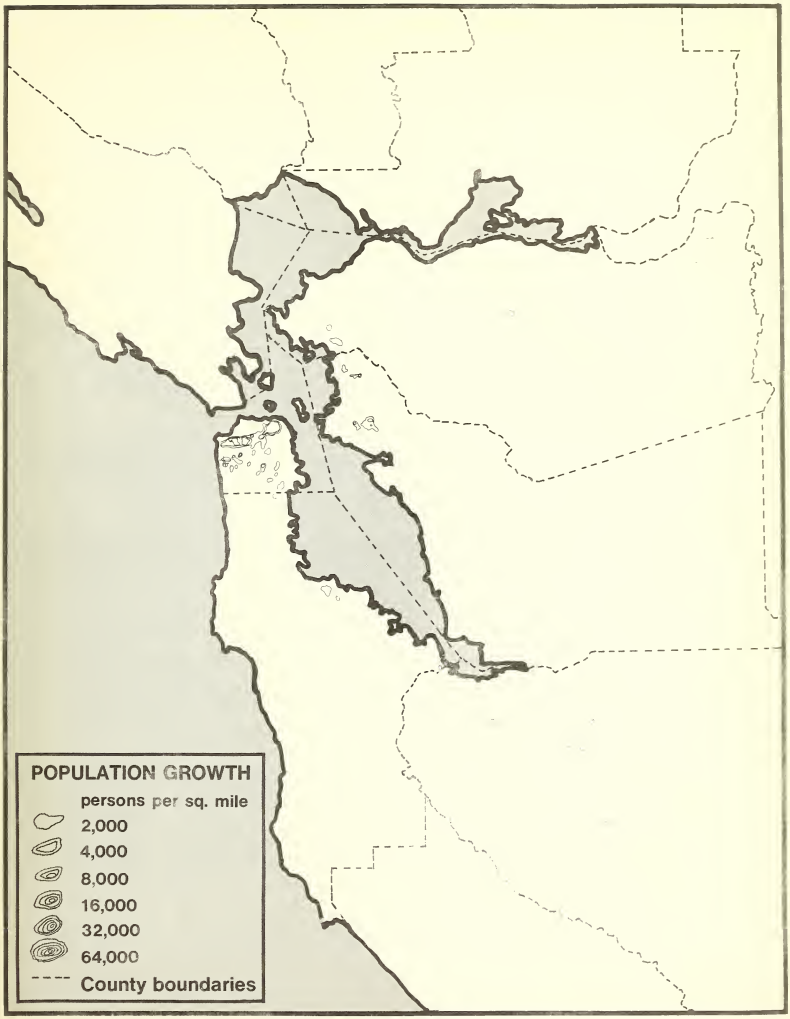
32,000
64,000
County boundaries

ASIAN 1970


POPULATION GROWTH
persons per sq. mile
2,000
4,000
8,000
16,000
32,000
64,000
County boundaries

ASIAN 1990

IV. ALAMEDA COUNTY

County Description and Overview

Alameda County was created from portions of Contra Costa and Santa Clara counties, and was officially incorporated on March 25, 1853. It received its name from El Arroyo de la Alameda (Alameda Creek). Earlier explorers of the territory that is now Alameda County include Pedro Fages in 1770, and de Anza in 1776. The county seat is Oakland, which was incorporated in 1852.

Alameda County encompasses 733 square miles; it extends eastward 35 miles from San Francisco Bay through rolling hills and valleys to the eastern side of the Central Coast range. Tidal flats line the bayshore, where much land has been reclaimed for industrial and military use. Between the shore and the hills is an alluvial plain varying in width from 3 miles at the northern boundary of the county to 9 miles near the south end of the San Francisco Bay. Slopes of grass and trees separate the coastal plain from Livermore Valley. Chaparral-covered slopes of the Diablo Range occupy the southeastern part of the county.

Alameda County is a densely populated, industrialized county and ranks first in terms of numbers of minority and total populations for the region. The combined Spanish-heritage, Asian and Black population of Alameda County as of 1970 was 335,985 or 30.6% of the total county population. The largest population concentration is Black (161,340), followed by Spanish-heritage (135,029) and then Asian (39,616). (Table 26)

Alameda is a leading manufacturing county. Food processing is one of the most important industries in terms of manufacturing employment, particularly in the production of bakery products. Fabricated metal products, transportation equipment (primarily motor vehicle assembly operations), and nonelectrical machinery are also important industries in the county. Table 27 shows the numbers of minorities employed in various industries in Alameda County. Industries are ranked in order of the greatest number of minorities employed.

Contemporary Residential Patterns (1970)

- Spanish heritage

The Spanish-heritage population for Alameda County (135,029) ranks it second for the nine counties in the region. It comprises 38.8% of the total minority population of Alameda County and 22.9% of the total Spanish-heritage population for the region. There are 11 identified Spanish-heritage population clusters in Alameda County. They are Fruitvale, Kennedy Tract, Hayward, Union City-DeCoto, Newark, Irvington, Fremont, Alameda, San Leandro East, San Leandro West, and San Lorenzo.

- Black

The Black population of Alameda County (161,340) comprises almost one-half (44.2%) of the total Black population for the region. Blacks in Alameda comprise 46.4% of

Table 26

ALAMEDA COUNTY POPULATION 1970

	POPULATION GROUP					
	SPANISH HERITAGE	BLACK	CHINESE	JAPANESE	FILIPINO	OTHER*
Total Minority Population by Group	135,029	161,340	19,506	10,523	9,587	11,859
Percent of Total Minority Group by County as Compared to Regional Total by Minority Group	22.9	44.2	20.1	20.2	18.4	27.1
Percent of Total County Population	12.3	14.7	1.8	1.0	.9	1.1
Percent of Total Minority Population for County	38.8	46.4	5.6	3.0	2.8	3.4
Percent of Total Nine-County Population	2.9	3.5	.4	.2	.2	.3
Percent of Total Nine-County Minority Population	11.2	13.4	1.6	.9	.8	1.0

*Other includes Native American, Hawaiian and all other minorities not specifically mentioned in this report.

**Less than one-tenth of a percent.

Table 27

ALAMEDA COUNTY MINORITY EMPLOYMENT

Industry	Number Employed	Percent
Service (includes business and repair services; private households and other personal services; entertainment and recreation; medical services; nongovernment education; welfare, religious and nonprofit sectors and legal and engineering professions)	30,224	24.7
Wholesale and Retail Trades (includes food, bakery and dairy stores; eating and drinking establishments and general merchandise stores)	20,806	17.0
Manufacturing (both durable and nondurable goods)	25,558	20.9
Public Administration (includes transportation; communication and utilities)	21,330	17.5
Finance, Insurance and Real Estate (includes banking and other credit agencies)	5,101	4.2
Construction	6,292	5.1
Agriculture, Forest and Fisheries	2,298	1.9
Mining	239	.2
Total All Industries	122,190	100.0

Source: U.S. Department of Labor, 1970 Census.

the total minority population for the county. The identified Black population clusters are West Berkeley - Emeryville, North and West Oakland, Fruitvale, East Oakland and Brookfield Village-Sobrante Park.

o Chinese

Alameda County has the second-largest Chinese population group for the region (19,506). It comprises 5.6% of the total minority population for Alameda County and 20.1% of the total Chinese population for the nine-county region. There is one identified Chinese population cluster for Alameda - that is Oakland Chinatown, near the Fruitvale border.

o Japanese

Alameda County has the third largest Japanese population group for the region (10,523) and comprises 3.0% of the total minority population for the county. It comprises 20.2% of the total Japanese population for the nine-county region. Alameda County's single identified Japanese cluster is the West Berkeley District, where 20.2% of the region's Japanese reside.

o Filipino

Alameda County has the second largest Filipino population group for the region (9,587) and comprises 2.8% of the total minority population for the county and 18.4% of the total Filipino population for the nine-county region. The Filipino population of Alameda County is concentrated in the City of Alameda.

Population Growth and Spatial Trends (1990)

As shown by Table 28, by 1990 Alameda County's total population is forecasted to be between 1,189,634 and 1,191,345. The county's minority population will respectively reach 151,258 - 151,564 Spanish heritage, 174,643 - 174,894 Blacks and 32,508 - 32,555 Asian by 1990. Collectively these minority groups will represent the largest aggregation of minority population in the region and will be the result of an annual growth rate ranging between .4 and .5 percent. (Table 17.)

Table 28

Alameda County

Minority Population Profile 1950 to 1990

Year		Minority			
		Spanish Heritage	Black	Asian*	Total
1950		5,223	69,442	12,694	740,315
1960		76,029	111,420	21,763	908,209
1970		135,029	161,340	30,029	1,099,017
1990	Case 1	213,053	174,643	32,508	1,189,634
	Case 2	213,359	174,894	32,555	1,191,345

*Projections for Asian category consist only of Chinese and Japanese populations.

The 1990 projected populations for two of Alameda County's largest minority groups (Spanish-heritage and Black) are both expanding outward from the major residential clusters found in 1970. Expansion is projected for all eleven 1970 Spanish-heritage residential areas. The Spanish-heritage population patterns will cover an area of approximately 40 square miles by 1990 where three-fourths of the area will accommodate population densities ranging between 2000 to 4000 people per square mile. (Table 29) The 8.5 square miles where population densities are projected to be greater than 4000 people per square mile are centered in each of the eleven 1970 clusters with highest densities concentrated in the Fruitvale-Kennedy Tract-Alameda districts and Hayward, Union City and Newark districts in the southwestern vector of the county.

By 1990 Black population density patterns are projected to cover an area of nearly 25 square miles, which represents an increase of nearly 6 additional square miles in area than found in 1970. This area increase projection is supported by the 1990 projection of a Black population increase by 13,303 to 13,554 persons from 1970. Nearly a decade from now Black population is expected to form a nearly continuous corridor from Berkeley to East Oakland with only the Oakland Business District intervening. Black population densities are projected to be the highest (one-half of the total Black population area) in the County by 1990 with nearly nine square miles of area where densities exceed 8000 people per square mile. Nearly an equal amount of area is found in the respective density categories 4000-8000 per square mile and 2000-4000 per square mile. The highest densities are projected for the West Berkeley-Emeryville, North Oakland and East Oakland districts.

Although the County's Asian population is forecasted to increase by 1990 to between 32,508 and 32,555 inhabitants, the actual projected patterns suggest that Asian population concentrations will decrease in area. In 1960 the Asian settlement pattern reached its greatest expansion—6.7 square miles in area. A decrease in area of approximately 3 square miles was observed in 1970 although during the decade 1960-70 Asian population increased by nearly 10,000 (Table 28). By 1990 it is projected that these concentrations will further decrease in area to 1.8 square miles. There will be about the same number of Asian clusters in 1990, but they will be much smaller. One will be in East Oakland and the other in the Berkeley-Albany area. It seems that Asians are dispersing their residential locations to the degree that it will become increasingly difficult to identify Asian clusters in the future.

Transportation Needs Analysis

Demographic Profile of Respondents

Community meetings were held in Union City and Oakland, and through further outreach assistance, the overall respondents who completed questionnaires were 58% Spanish heritage, 10% Chinese, 6% Black, with 5% each represented by Filipino and Japanese. The remaining questionnaires did not contain information on ethnicity. The respondents are from Oakland, Berkeley, Union City, Hayward, San Leandro, Alameda, and Castro Valley.

Sixty-eight of the respondents were 68% female, 25% male, and the median age combined for both sexes was 40. Of those who responded 36% had some college education. Unemployment for the respondents was nearly 50%. Forty-three percent of the respondents had an income of less than $7,000.00. Nearly 40% of the respondents reported having difficulty walking, 14% reported hearing difficulties and nearly 26% reported sight impairment.

Table 29

SQUARE MILES IN POPULATION DENSITY CATEGORIES

SAN FRANCISCO BAY REGION

	Density Category						
ALAMEDA COUNTY	64,000	32,000	16,000	8,000	4,000	2,000	All Categories
Spanish heritage							
1990					8.5000	30.8750	39.3750
1970					(2.9375)	(5.6250)	
				1.0625	5.5625	25.2500	32.9375
1960					(5.4875)	(24.8750)	
					.0750E	.3750	.3750
1950					(.0625)	(.3125)	
					.0125E	.0625	.0625
Black							
1990				8.7500	7.5000	8.5000	24.7500
1970				(2.2500)	(2.0000)	(2.1875)	
				6.5000	5.5000	6.3125	18.3125
1960				(1.3125)	(.1000)	(1.2500)	
			.1250	5.1875	5.4000	5.0625	15.8750
1950				(2.8125)	(3.6250)	(2.9375)	
			.0625	2.3750	1.8750	2.1250	6.4375
Asian							
1990					.2813	1.4999	1.7812
1970					-(.0312)	-(1.1875)	
					.3125	2.6875	3.0000
1960					-(1,2625)	-(2.4375)	
					1.5750	5.1250	6.7000
1950					(.7000)	(2.5000)	
				.1875	.8750	2.6250	3.6875

E = Estimate

*-Numbers in parenthesis indicate change in area between years.

Travel Mode

The majority of the respondents reported the automobile as the primary mode of travel for all seven travel areas in which information was solicited. For the journey to work 42% of the respondents reported using the car (either as car driver or passenger). Work trips also account for the highest bus usage (25%). Automobile usage for medical and recreation trips also accounted for the greatest number of responses (75%), followed by medical trips (68%), and shopping trips (65%). Bus usage is less than 20% for all types of travel with the exception of work and recreation. (Table 30).

Alameda County is served by the Bay Area Rapid Transit (BART) system and no more than 7% of the respondents reported using BART for any types of travel use.

Destinations

Table 31 lists the frequency of travel to various destinations for the different types of travel. Union City, Oakland, Berkeley and San Francisco are the centers of employment for the majority of respondents. The majority of the trips to obtain medical services were to Fremont, Hayward and Berkeley. According to the data gathered, trips for grocery shopping were to the cities of Fremont, Hayward and Oakland, the cities which most of the respondents reported as their place of residence. Destinations for recreational activities and social visits are the most dispersed, with a number of social visits having destinations outside the county and region.

Alternate Travel Mode

Respondents were asked on the questionnaires what their alternate or secondary travel mode choice would be, by trip type. Responses suggest that respondents would prefer to be car passengers rather than drive. The data also shows that regular bus would be a suitable alternate for the work trip, as indicated by 35% of the respondents. An additional 14% reported that BART would be an acceptable alternate travel mode for trips to work. Respondents selected public transit as an alternate travel mode for all types of trips, with the exception of recreation trips. For this type of trip there was a heavy dependence on the private car, either as driver or passenger (Table 32).

Reasons for Travel Mode Choice

The majority of the respondents cite convenience as the reason for their choice of travel mode. The second greatest number of respondents reported their travel choice was determined by lack of alternate travel modes with concern towards using the least amount of travel time. This most often was tied to what they perceived as inadequate bus services. For work trips in particular, the unreliability of public transit or the necessity of a car in their employment was cited as reason for choice of the car as a travel mode. (Table 33)

Transit Needs

There is an imbalance in public transportation services in Alameda County. Even though Oakland and Berkeley are more adequately served by a combination of BART and AC

Table 30

PRIMARY TRAVEL MODE CHOICE

ALAMEDA COUNTY	TRAVEL MODE (Numbers in percentages)								
TRAVEL PURPOSE	DRIVE CAR	CAR PASSENGER	REGULAR BUS	DEMAND RESPONSE BUS	RAILROAD	BART	WALK	BICYCLE MOTORCYCLE	OTHER
WORK	37	5	25	2		6	8		
MEDICAL	42	26	19	1		2	5		8
GROCERIES	45	20	11			1	22	1	2
SOCIAL SERVICES	25	14	19			1	5	1	2
RECREATION	43	32	17		1	7	1	4	
RELIGIOUS	20	20	8	1		2	16	4	
VISITING	42	34	15	1	1	6	11	4	2

N = 83

Table 31

TRAVEL DESTINATION

ALAMEDA COUNTY	TRAVEL PURPOSE (Numbers in percentages)						
	WORK	MEDICAL	GROCERIES	SOCIAL SERVICES	RECREATION	RELIGION	VISITING
CITIES:							
Alameda			2		1		1
Berkeley	7	1	3	1	5	1	5
Castro Valley		6	2		2		
Fremont	1	11	9	3	3	6	6
Hayward		14	6	2	4		4
Newark		1			1		
Oakland	34	42	42	27	23	24	27
San Francisco	7	4	3	2	18	3	15
San Leandro	1	3	1	1	1		1
Santa Clara						1	2
Union City	7	1	5	2		6	2
Walnut Creek							
County-Wide	2				2		2
Bay Area				1	3		1
Out of the Region	1				13	1	7

Table 32

ALTERNATE TRAVEL MODE CHOICE

ALAMEDA COUNTY	TRAVEL MODE (Numbers in percentages)								
TRAVEL PURPOSE	DRIVE CAR	CAR PASSENGER	REGULAR BUS	DEMAND RESPONSE BUS	RAILROAD	BART	WALK	BICYCLE MOTORCYCLE	OTHER
WORK	11	13	35	2		14	10		
MEDICAL	16	31	41	1		8	4		2
GROCERIES	12	22	22			1	23	1	1
SOCIAL SERVICES	6	14	25			6	4	1	1
RECREATION	12	29	25		1	11	8	5	2
RELIGIOUS	12	22	22	1			11		
VISITING	9	25	30	1	1	12	8		1

N = 83

Table 33

ALAMEDA COUNTY

REASONS FOR SELECTION OF TRAVEL MODE

	TRAVEL PURPOSE (Numbers in percentages)						
	WORK	MEDICAL	GROCERIES	SOCIAL SERVICES	RECREATION	RELIGION	VISITING
Convenience	26	37	39	14	33	13	43
Only available mode	6	8	6	2	1	6	7
Least travel time	11	13	6	2	5	2	4
No car available	12	7	5	10	6	4	8
Least costly	2	7		2			1
Physically handicapped		7	4		1		
Unreliable public transportation	4	4	1	2			
Car required at work	8						
Safety considerations				1	2		1
No Sunday bus service						1	

Transit, there is a need to fully address the transportation needs of transit dependent groups (ethnic, minority, low-income, elderly, and handicapped) either through the expansion of existing services and/or new services such as para-transit systems. For example, in the southern part of the County (the Valley and Tri-City areas), where auto ownership is low, there is a transit-dependent population which needs improved transit service in order to expedite their travel (particularly travel to work). Local transit service in Fremont, Union City, and Newark needs to be expanded to meet the needs of the transit dependent population.

Other Transit Related Issues of Concern to Minorities in Alameda County

Highway development (particularly the Route 238 development) and its impact on communities where large numbers of low-income minorities reside is still of major concern.

Currently a Draft Environmental Impact Report (DEIR) which describes the most important impacts resulting from the proposed revisions to the MTC Regional Transportation Plan (RTP) regarding the proposed Route 238 and related highway facility improvements has been recently published. In December 1975, the City of Hayward requested that the MTC include the proposal to build a Route 238 Freeway in the schedule of priorities of its Regional Transportation Plan. The MTC Work Program and Plan Revision Committee then directed MTC staff to conduct a study of the area affected by Route 238, determine its future transportation requirements, and report any changes that would be required in the Regional Transportation Plan in order to implement them. The DEIR is part of the overall MTC staff work in the MTC Southern Alameda County (Foothill) Corridor Study. The actual Route 238 Corridor consists of the area near Mission and Foothill Boulevards in downtown Hayward and the area between Mission Boulevard and the BART tracks extending from Hayward to Fremont.

Agreements for the development and construction of Route 238 were signed with the cities of Hayward and Fremont and also with Alameda County in the mid-1960's. However, the City of Union City which is located in the approximate midpoint of the route, has never signed a freeway agreement with the State of California. The primary source of opposition to the construction of the freeway through the urbanized portions of Union City was the Chicano community of Decoto which would have been directly impacted by the construction of the freeway.

In 1971, the Sierra Club and La Raza Unida of Southern Alameda County filed suit against the United States Secretary of Transportation and the State of California Division of Highways seeking to enjoin both Federal and State agencies from acquiring any additional rights-of-way until:

1. A satisfactory relocation assistance program was devised,

2. The defendents complied with the provisions of the National Environmental Policy Act of 1969 (NEPA) and Section 4(f) of the Department of Transportation Act of 1965.

In the study area, Hispanics are the largest minority group with scattered enclaves of Blacks, Filipinos, Chinese and Japanese.

Table 35 provides a brief overview of the DEIR impact results regarding the various alternatives under consideration and special commercial and residential areas.

Suggestions to Meet Transit Needs

Respondents most often suggested that MTC can meet their transit needs by increasing and improving bus services. This is an extremely important consideration to facilitate trips for medical services and work. It is also an important consideration for all other trip types considered. Within the present public transit systems (particularly BART) there is a need to increase reliability of service, according to the respondents. For trips to medical facilities, respondents state that MTC can facilitate service by expanding transit services for the elderly and the physically handicapped. Respondents also suggested public transit fares be reduced. (Table 34).

Conclusions and Recommendations - Alameda County

All of the issues and concerns expressed by respondents in Alameda are tied to lack of transit services or inadequacies in existing services. The following are recommendations for solutions to these issues and concerns.

Issue*

o No transit services

Recommendations

- AC Transit services in Union City should be increased.
- The level of transit services should be improved in the outer-county Valley and Tri-City areas.

Issue

o Unreliable transit services

Recommendations

- Bi-lingual information on BART schedules should be readily available.
- Fare rebates should be offered when BART service is unreliable.

Issue

o Slow transit service

Recommendations

- Increase express bus service.

* For a more detailed explanation of the subject issues, please refer to Chapter XIII - Conclusions and recommendations (p. 209).

Table 34

WAYS MTC CAN FACILITATE TRAVEL

ALAMEDA COUNTY	TRAVEL PURPOSE (Numbers in percentages)						
	WORK	MEDICAL	GROCERIES	SOCIAL SERVICES	RECREATION	RELIGION	VISITING
Increase/improve bus services	12	16	6	6	10	5	7
Expand SOS* Services		6					1
Handicapped transportation services		2					1
Expand senior citizen services		2	1		1		
More information re: BART Schedule/connections	2			2			
Sunday BART services	1			1	1		2
Dial-A-Ride	2	1	4		1		1
Bus transfers to & from BART	2						1
Increase weekend bus service					2		1
Better information re: Bus scheduling				1	1		1
Increase express bus service	4			1	1	1	1
Improve BART service/ reliability	11	6	1				1
Cheaper transportation	4	2			1		
More bus service in Union City	1						
More bus shelters	1						
More courteous drivers			1				

Table 35

SPECIAL COMMERCIAL AND RESIDENTIAL IMPACTS

CRITERIA	Alternatives A COMMITTED SYSTEM	B EXISTING SYSTEM UPGRADE	C HAYWARD EXPRESSWAY BYPASS	D FULL EXPRESSWAY SYSTEM	E FULL FREEWAY SYSTEM	F STAFF RECOMMENDATION
COMMERCIAL AREAS	SLIGHT ADVERSE	SIGNIFICANT ADVERSE	SIGNIFICANT ADVERSE	SIGNIFICANT ADVERSE	SIGNIFICANT ADVERSE	SLIGHT ADVERSE
1. Acquisition of Businesses	Improvements to Rte. 238-580 Interchange requires 13 businesses	Business takings related to arterial street improvements (35) and Mission Blvd. (60)	Approximately 90 businesses on Mission Blvd. required, 35 for Rte. 238 expressway; arterials same as B	Approximately 75 businesses required for Routes 238 and 92, arterials same as B	Similar to D, arterials same as B	Less than 5 businesses on Rte. 17/230 Interchange; approximately 30 (same as B) for arterials
2. Traffic effects	Traffic impacts on the redevelopment potential of downtown Hayward will be minimal because of the obsolete retailing layouts and competition from nearby regional shopping centers and office complexes. Traffic impacts on the continued development of the Fremont core will also be minimal because of the design of the shopping centers, other activities, and the BART station.					
3. Neighborhood Disruption (as measured by extent of acquisitions)	ADVERSE 200 dwelling units due to 580/238 interchange; 100 dwelling units due to arterials	ADVERSE 75 dwelling units along Mission Blvd. 11 dwelling units Rte. 17/238 Interchange	SIGNIFICANT ADVERSE 530 dwelling units due to Rte. 238 Expressway effect neighborhoods northeast, east and southeast of downtown Hayward	SIGNIFICANT ADVERSE 540 dwelling units Rte. 92, 680 dwelling units Rte. 238; affect neighborhoods northeast, east and southeast of downtown Hayward; Decoto community in Union City less concentrated impact in Fremont	SIGNIFICANT ADVERSE 540 dwelling units Rte. 92, 690 dwelling units Rte. 238 (other effects similar to Alternative D)	ADVERSE 11 dwelling units Route 17/238, 35 dwelling units Rte. 61 in San Leandro

- Bill bridge tolls by license plate number to reduce auto commuter congestion at toll booths.

Issue

o Lack of transit service in off-peak periods

Recommendations

- Provide Sunday BART service; increase weekend bus services.

Issue

o High fares

Recommendations

- Reduce transit (bus) fares.
- Reduce BART fares.
- Provide transfer/discount tickets from bus to BART.

Issue

o Inconvenient transit service

Recommendations

- Provide more information on bus schedules.
- Provide more bus stop shelters.

Issue

o Inadequate transit safety

Recommendations

- Place security personnel on buses.
- Improve lighting at bus stops.

Issue

o Inadequate senior citizen services

Recommendations

- Provide a demand response system for senior citizens.

Issue

o Inadequate transit services for the physically handicapped

- Provide a demand response system for the physically handicapped.

- Wheel-chair lifts on buses.

Issue

o Discourteous transit personnel

Recommendation

- Improve driver courtesy through better training and orientation programs.

V. CONTRA COSTA COUNTY

County Description and Overview

Contra Costa in Spanish means "opposite coast", so named because of its position in relation to San Francisco. Formed and incorporated in February of 1850, it is one of the original 27 counties in California and formerly in what is now Alameda County. The area was first explored in 1772, and in 1823 Francisco Maria Castro was granted the vast Rancho San Pablo which included what is now San Pablo and Richmond. The Pacheco House, a historic structure in the City of Concord was built in 1834 on Rancho del Diablo. Governor Alvarado lived and died there.

Emcompassing 732 square miles, Contra Costa County lies east of San Francisco Bay where the south Coast Ranges meet with San Francisco, San Pablo, and Suisun bays and the Sacramento River. Together, these form a 70-mile waterfront. Moderately rolling to steeply sloping ridges, with small narrow valleys between, trend northwest-southeast in the west and central portion of the county. Mt. Diablo, 3,849 feet elevation, is the highest point in the county. Contra Costa was incorporated in February of 1850. The county seat is Martinez. The primary manufacturing activity in Contra Costa is petroleum refining.

Regionally, Contra Costa ranks fourth in terms of total population and fifth for total minority population. The combined Spanish-heritage, Black and Asian population is 101,749 or 18.2% of the total county population. The largest minority population group is Spanish-heritage (87,700) followed by Black (39,890) and Asian (9,956). (Table 36)

Table 37 shows the numbers of minorities employed in various industries in Contra Costa County. Industries are ranked in order of the greatest number of minorities employed.

Contemporary Residential Patterns (1970)

- o Spanish heritage

The Spanish-heritage population for Contra Costa County (51,903) ranks it fifth for the region. It comprises almost half (49.3%) of the total minority population for the county, and 8.8% of the total Spanish-heritage population for the region. The Spanish-heritage clusters for the county are in Rodeo, San Pablo-Richmond Annex, Hercules and Crockett (all of which are located along the Bay to the north) and Martinez, West Pittsburg, Antioch, Brentwood and Oakley in the north-easterly reaches of the county.

- o Black

The Black population for Contra Costa (39,890) ranks it third on a regional basis. Blacks comprise 37.9% of the total minority population for the county and 10.9% of the total Black population for the nine-county region. The identified Black population clusters for Contra Costa County are Parchester Village, Iron Triangle-Southside District, Kennedy Park-Richmond Annex, North Pittsburg, West Pittsburg and Central Pittsburg.

Table 36

CONTRA COSTA COUNTY POPULATION 1970

	POPULATION GROUP					
	SPANISH HERITAGE	BLACK	CHINESE	JAPANESE	FILIPINO	OTHER*
Total Minority Population by Group	51,903	39,890	3,229	3,979	2,748	3,552
Percent of Total Minority Group by County as Compared to Regional Total by Minority Group	8.8	10.9	3.0	7.7	5.0	8.1
Percent of Total County Population	9.3	7.1	.6	.7	.5	.6
Percent of Total Minority Population for County	49.2	37.9	3.1	3.8	2.6	3.4
Percent of Total Nine-County Population	1.1	.9	.1	.1	.1	.1
Percent of Total Nine-County Minority Population	4.3	3.3	.3	.3	.2	.3

*Other includes Native American, Hawaiian and all other minorities not specifically mentioned in this report.

**Less than one-tenth of a percent.

Table 37

CONTRA COSTA COUNTY MINORITY EMPLOYMENT

Industry	Number Employed	Percent
Service (includes business and repair services; private households and other personal services; entertainment and recreation; medical services; nongovernment education; welfare, religious and nonprofit sectors and legal and engineering professions)	8,297	23.7
Wholesale and Retail Trades (includes food, bakery and dairy stores; eating and drinking establishments and general merchandise stores)	6,083	17.4
Manufacturing (both durable and nondurable goods)	7,905	22.6
Public Administration (includes transportation; communication and utilities)	5,367	15.3
Finance, Insurance and Real Estate (includes banking and other credit agencies)	1,425	4.2
Construction	2,246	6.4
Agriculture, Forest and Fisheries	807	2.3
Mining	122	0.3
Total All Industries	34,993	100.0

Source: U.S. Department of Labor, 1970 Census.

o Chinese

The Chinese population of Contra Costa County (3,329) ranks it fifth for the region. It comprises 3.1% of the total minority population for the county and 3.0% of the total Chinese population for the nine-county region.

o Japanese

The Japanese population of Contra Costa County (3,979) comprises 3.8% of the total county minority population and ranks it fifth in size regionally. Japanese in Contra Costa comprise 7.7% of the total Japanese population for the nine-county region, and are clustered in the El-Cerrito-Richmond Annex area, with significant numbers residing in Concord as well.

o Filipino

The Filipino population for the county (2,748) comprises 2.6% of the total county minority population and 5.0% of the total Filipino population for the nine-county region. The county ranks sixth on a regional basis for total Filipino population. The only Filipino population cluster for Contra Costa County is West Pittsburg.

Population Growth and Spatial Trends (1990)

In terms of general population distributions, Contra Costa County can easily be divided into a high-density western sector and a low-density area to the east. The county's total population is forecasted to reach between 695,074 and 813,752 by the year 1990. The largest minority group in the county, Spanish heritage, will range between 97,476 to 114,119 by 1990. Blacks will number between 49,645 and 58,122 and Asians are forecasted to be between 8,971 and 10,502 (Table 38).

Table 38

Contra Costa County

Minority Population Profile 1950 to 1990

Year		Minority			
		Spanish Heritage	Black	Asian*	Total
1950		2,685	22,023	1,855	298,984
1960		34,558	25,294	2,892	409,030
1970		51,903	39,890	7,208	558,489
1990	Case 1	97,476	49,645	8,971	695,074
	Case 2	114,119	58,122	10,502	813,752

*Projections for Asian category consist only of Chinese and Japanese population.

Spanish-heritage population settlement patterns are projected to expand in the western high-density section of the county, at Rodeo, San Pablo-Richmond Annex, Hercules, Crockett and Martinez. This is also true in settlements located in the lower density rural eastern sector, namely at West Pittsburg, Antioch, Brentwood and Oakley. By 1990, Spanish-heritage population will inhabit an area of 13 square miles in the county. Population densities will exceed 2000 people per square mile. This represents a 40% increase in area when compared to 1970 distributions, which covered nine square miles. The two square miles where population density is projected to exceed 4000 people per square mile will be located in the West Pittsburg, Antioch and Oakley areas. (Table 39)

With the exception of the Pittsburg area, Blacks have traditionally located in the high-density Richmond area. The settlement patterns projected for 1990 will be located in the same areas as 1970. They will cover just over 9 square miles in area, representing an increase of nearly three square miles in area above the 1970 pattern. Contra Costa County's Black settlements are generally characterized by high densities. Of the projected pattern, nearly five square miles will have population densities exceeding 4000 people per square mile. High-density patterns are projected for Parchester Village, North Richmond, Iron Triangle-Southside District and Kennedy Park-Richmond Annex districts in the western part of the county with one area to the east in Pittsburg.

Transportation Needs Analysis

Demographic Profile of Respondents

Community meetings were held in Walnut Creek and Concord and through further outreach assistance by community agencies, the overall respondents who completed questionnaires were 40% Japanese, 30% Spanish heritage, 18% Black, 3% Filipino, and 2% Chinese. The majority of the respondents reside in Walnut Creek, Concord, Richmond, Pittsburg,with the remainder representing nine other cities (Antioch, Moraga, Orinda, Pleasant Hill, Lafayette, Brentwood, Oakley, San Pablo and Martinez). Fifty-one of the respondents were male, 39% were female, and the median age for both sexes was 37. Twenty-three percent of the respondents had some college education, 22% had less than high school, and 30% graduated from high school. Twelve percent of the respondents had an income of less than $7,000 and 17% reported either seeing, hearing or walking difficulties.

Travel Mode

Seventy-four percent of the respondents reported the automobile as the primary transit mode for trips related to work, 77% to medical services, and 80% for grocery shopping. The automobile as a primary transit mode constituted 60% of the responses for trips to obtain social services. For trips related to recreation, and social visits the use of the automobile accounts for 75% of the responses. When these figures are combined with the category of car passenger, the average accounts for 95% of all responses. The use of public transit as a travel mode is rather small. (Table 40)

Table 89

SQUARE MILES IN POPULATION DENSITY CATEGORIES

SAN FRANCISCO BAY REGION

CONTRA COSTA COUNTY	Density Category 64,000	32,000	16,000	8,000	4,000	2,000	All Categories
Spanish heritage							
1990					2.3125	11.0625	13.375
1970					(.9375	(3.0625)	
					1.3750	8.0000	9.3750
1960					(1.3534)	(7.8750)	
					.0215E	.1250	-.1250
1950					(.0108)	(.0625)	
					.0108E	.0625E	.0733
Black							
1990				1.8750	3.3125	4.0625	9.2500
1970				(.5000)	(.8125)	(1.7500)	
				1.3750	2.500	2.3125	6.1875
1960				(.7500)	(1.3750)	(.6250)	
				.6250	1.1250	1.6875	3.4375
1950				(.3125)	-(.2500)	-(.1150)	
				.3125	1.3750	1.8125	3.5000
Asian							
1990						8.5000	8.5000
1970						(.5000)	
					1.3750	8.000	9.3750
1960					(1.3534)	(7.8750)	
					.0216E	.1250	.1466
1950					(.0108)	(.0625)	
					.0108E	.0625E	.0733

E = estimate

*-Numbers in parenthesis indicate change in area between years.

Table 40

PRIMARY TRAVEL MODE CHOICE

CONTRA COSTA COUNTY	TRAVEL MODE (Numbers in percentages)								
TRAVEL PURPOSE	DRIVE CAR	CAR PASSENGER	REGULAR BUS	DEMAND RESPONSE BUS	RAILROAD	BART	WALK	BICYCLE MOTORCYCLE	OTHER
WORK	74	17	6		1	2	12	2	
MEDICAL	77	26	5			3	7	1	
GROCERIES	80	21	2			1	8	4	
SOCIAL SERVICES	60	14	8			3	8	2	
RECREATION	74	28	6	1	1	3	5	6	3
RELIGIOUS	61	20	4		1	2	1	3	
VISITING	79	27	8			10	14	4	

N = 110

Destinations

Trip destinations, as reported by respondents, range over 26 locations for all types of travel. Most of the respondents reported Richmond and Concord as their work trip destinations, with a smaller number reporting work destinations dispersed over 14 additional locations. Destinations for social visits are even more dispersed. Eighteen different locations were reported for this type of travel. Concord and Richmond were the location most often reported, followed by Oakland. Walnut Creek and Richmond were the destinations most often reported for medical trips, followed by Concord and San Pablo. The majority of the respondents reported locations for grocery shopping which are relatively close to their place of residence. Recreational travel was the category in which respondents most often reported traveling out of the county or the region (Table 41).

Alternate Travel Mode

Public transit, when available and reliable, was indicated by many of the respondents as an alternate travel mode. A larger number of respondents than in other counties indicated walking or cycling to their trip destinitation as a feasable alternate mode of travel. A number of respondents expressed an interest in some type of demand responsive bus system for trips to obtain social and medical services and for grocery shopping. The automobile was selected by the respondents as the first choice for an alternate travelmode; however, many of the respondents indicated a willingness or desire to ride as passengers (Table 42).

Reasons for Travel Mode Choice

Contra Costa respondents most often reported that convenience was a prime consideration in their choice of travel mode. In most instances this was tied to the absence of and the inadequacy of transit systems, which were the considerations receiving the next largest number of responses. Twelve percent of the respondents stated that their choice of the automobile as travel mode is dictated by the fact that a car is required for their type of work. Expense and time constraints were also considerations, particularly in the areas of travel to work and for medical services. No Sunday transit services supports the continued use of the automobile for trips to religious services (Table 43).

Transit Needs

Transit services in Contra Costa County have not been fully developed and as a result, inequities exist in the transit services provided to residents of this county. For instance, services north of McDonald Avenue are adequate, but services south of this line are not. Services along Treat Boulevard and Oak Grove should also be improved, with more frequent scheduling and a greater number of stops along the line.

There are areas of the county that have no public transit services at this time, e.g., Rodeo, Pinole, Crockett, Hercules and Martinez. Pittsburg, West Pittsburg, Antioch and Brentwood are all under served by public transit, as are El Pueblo and Oakley.

Table 41

TRAVEL DESTINATION

CONTRA COSTA COUNTY	TRAVEL PURPOSE (Numbers in percentages)						
	WORK	MEDICAL	GROCERIES	SOCIAL SERVICES	RECREATION	RELIGION	VISITING
CITIES:							
Antioch	1	1	1	1	4	2	5
Berkeley	2	4			2	3	15
Concord	10	7	14	6	6	13	
Danville							1
El Cerrito			3		1	1	2
Foster City							1
Fresno	3	1	1				
Lafayette	6	1	2	1			
Martinez							1
Moraga	1			2	5	1	12
Oakland		1	3				
Orinda	9		6	5		5	5
Pittsburg	2	1	7	2			
Pleasant Hill							1
Redwood City	28	31	26	15	5	16	15
Richmond	5	5	2	1	11	2	7
San Bruno	1						3
San Francisco	1						1
San Jose	1	7	9	1	2	3	5
San Mateo	8	18	9	5	1	2	3
San Pablo					1		
San Rafael	1			2	11		7
Walnut Creek							
Vallejo							
Bay Area							
Outside of Region							

Table 42

ALTERNATE TRAVEL MODE CHOICE

CONTRA COSTA COUNTY	TRAVEL MODE (Numbers in percentages)								
TRAVEL PURPOSE	DRIVE CAR	CAR PASSENGER	REGULAR BUS	DEMAND RESPONSE BUS	RAILROAD	BART	WALK	BICYCLE MOTORCYCLE	OTHER
WORK	21	21	20	1	1	9	21	15	2
MEDICAL	21	25	30	4	1	12	18	11	4
GROCERIES	25	23	17	3			23	13	
SOCIAL SERVICES	19	22	21	4	1	4	9	13	1
RECREATION	16	20	20	1	3	16	14	16	
RELIGIOUS	15	19	11	1		2	17	6	2
VISITING	16	23	22	2	2	16	11	6	1

N = 110

Table 43

CONTRA COSTA COUNTY

REASONS FOR SELECTION OF TRAVEL MODE

	TRAVEL PURPOSE (Numbers in percentages)						
	WORK	MEDICAL	GROCERIES	SOCIAL SERVICES	RECREATION	RELIGION	VISITING
Convenience	26	35	43	18	32	19	25
No public transit available	11	20	13	7	12	22	15
Proximity of destination	2			2		3	
Only transportation mode available	8	13	5	9	9	7	5
Car required in work	12						
Time constraints	5	6	5	3	2	1	5
Inadequate bus service	4	4	4	1	2		2
No car available	5	4	3	3		3	2
No Sunday bus service			1			11	1
Least costly	4	2	2		6		2
Safety consideration	1						
Limited parking available	1						1

N = 110

Not only are local transit services needed within these cities - it is also necessary to strengthen the county's entire inter-city system.

Transit-Related Issues of Concern to Minorities in Contra Costa County

One other area of concern is the development of the Hoffman Freeway and its unknown effect on the minority community in Richmond, There is a need to assess the commute transit access, and the housing, economic and employment benefits, as these relate to the minority community.*

Suggestions to Meet Transit Needs

Regardless of travel purpose, the majority of the respondents stressed the need for MTC to provide better public transportation for the county. One possible alternative is to provide a demand responsive system in rural areas of Contra Costa. Another suggestion was lower fares, which would most likely increase the use of public transit (Table 44).

Conclusions and Recommendations - Contra Costa County

As noted in the discussion of transit needs, inequities exist in the level of service to different areas of Contra Costa. All of the respondents, however, no matter where their place of residence, expressed concerns about inadequacies in transit services. The following are recommendations for solutions to those issues and concerns.

Issue

o No transit service

Recommendations

- Provide bus routes between Lafayette and Concord.
- Provide bus routes between Oakley and Martinez.
- Provide bus routes between Martinez and West Contra Costa County.
- Improve the highways.
- Provide local bus systems in the cities of Rodeo, Pinole, Crockett, Hercules, San Pablo and Martinez.

Issue

o Inadequate transit service

Recommendations

- Expand bus routes by providing feeder service to main lines.

* Information pertaining to the Hoffman Freeway can be obtained from the OEDP (Overall Economic Development Plan) for the city of Richmond and the Draft Environmental Impact Report (EIR) on the Hoffman Freeway.

Table 44

WAYS MTC CAN FACILITATE TRAVEL

CONTRA COSTA COUNTY	TRAVEL PURPOSE (Numbers in percentages)						
	WORK	MEDICAL	GROCERIES	SOCIAL SERVICES	RECREATION	RELIGION	VISITING
Provide better public transportation	36	33	33	20	19	14	15
Provide demand response buses	11	13	11		11		6
Provide feeder buses	3	5	7	6	6	4	6
Provide cheaper public transportation	2	2	2	2	3		2
Provide Sunday BART service				1	2	1	1
Provide better region-transit exchange	1			1			2
Provide weekend bus service			1		1	1	
Improve highways	1					1	
Organize car pools	1			1			
Expand BART system					2		1
Provide bus route between Lafayette & Concord						1	
Better services for handicapped			1				
Relieve traffic congestion on Moraga Way	1						
Provide sheltered bus stops		1					
Expand ferry service	1						
Provide bus route between Oaklet & Martinez	1						
Provide free transit							2

- Improve intra- and inter-county transit exchange facilities and mechanisms.

- Organize car pools.

- Increase services in Richmond, North Richmond/Parchester/Montalvin Manor south of McDonald Avenue.

- Establish more bus stops in Concord on the Treat Boulevard and Oak Grove routes.

- Improve transit services in Pittsburg, West Pittsburg, Antioch, Brentwood, and Oakley.

Issue

o Lack of transit service in off-peak periods

Recommendations

- Provide Sunday BART service

- Provide or improve weekend bus service.

Issue

o High fares

Recommendations

- Reduce transit fares

- Provide free or reduced transit fares to transit-dependent populations who cannot afford existing fares.

Issue

o Inconvenient transit service

Recommendations

- Relieve congestion on Moraga Way.

- Provide bus stop shelters.

- Provide demand response bus services.

Issue

o Inadequate transit safety

Recommendations

- Provide better lighting at bus stops.
- Increase security patrols.

Issue

o Inadequate transit to recreation sites

Recommendations

- Improve inter- and intra-city transit networks.
- Provide weekend transit services.

VI. MARIN COUNTY

County Description and Overview

Marin County is one of the original 27 counties in California. Theories about the origin and the name range from an abbreviation of Bahia de Nuestra Senora del Rosario la Marinera (the bay named by Ayala in 1775) to a corruption of El Marinero (The Sailor), an early Indian chieftain. First recorded exploration was in 1579 by Francis Drake, in or around the area now known as Drakes Bay. The county was once well populated by Indians, a fact confirmed by the discovery of well over 200 shell mounds throughout the area. Marin was divided into great "ranchos." Population and growth, accelerated after the San Francisco earthquake of 1906, gaining additional impetus with the completion of the Golden Gate Bridge in 1937, and again with the opening of the Richmond-San Rafael Bridge in 1956. Marin was incorporated in February of 1850; the county seat is San Rafael.

Marin encompasses 520 square miles and is situated on a rugged peninsula which extends from the Golden Gate northward in the North Coast Ranges. The Pacific shoreline has numerous coves and bays such as Tomales Bay, Bolinas Lagoon and Drakes Bay. Because of its beauty and location near San Francisco, Marin County has several state and national recreation areas, including Point Reyes National Seashore and the Muir Woods National Monument. The largest manufacturing industry is electrical machinery. Others include printing and publishing, stone, clay, and glass products, transportation equipment and food processing industries. The livestock industry represents the greatest share of the gross agricultural value of the county followed by field crops and nursery products.

Regionally, Marin County ranks sixth in terms of total county population (206,040) and eighth for total minority population (20,767). The combined Spanish-heritage, Black and Asian population for the county is 19,631 or 9.5% of the total county population. The largest population group is Spanish heritage (12,021). The Black population is 4,964 and the combined Asian population is 2,646 (Table 45).

Table 46 shows the numbers of minorities employed in various industries in Marin County. Industries are ranked in order of the greatest number of minorities employed.

Contemporary Residential Patterns (1970)

- Spanish heritage

The Spanish-heritage population for Marin County (12,021) ranks it eighth for the region. It comprises 57.9% of the total minority population for the county and 2.0% of the total Spanish-heritage population for the region. There are four identified Spanish-heritage clusters in Marin County - San Rafael, San Anselmo, Fairfax and Novato.

Table 45

MARIN COUNTY POPULATION 1970

	POPULATION GROUP					
	SPANISH HERITAGE	BLACK	CHINESE	JAPANESE	FILIPINO	OTHER*
Total Minority Population by Group	12,021	4,964	1,007	1,174	465	1,136
Percent of Total Minority Group by County as Compared to Regional Total by Minority Group	2.0	1.4	1.0	2.3	.9	2.6
Percent of Total County Population	5.8	2.4	.5	.6	.2	.6
Percent of Total Minority Population for County	57.9	23.9	4.8	5.7	2.2	5.5
Percent of Total Nine-County Population	.3	.1	**	**	**	**
Percent of Total Nine-County Minority Population	1.0	.4	.1	.1	**	.1

*Other includes Native American, Hawaiian and all other minorities not specifically mentioned in this report.

**Less than one-tenth of a percent.

Table 46

MARIN COUNTY MINORITY EMPLOYMENT

Industry	Number Employed	Percent
Service (includes business and repair services; private households and other personal services; entertainment and recreation; medical services; nongovernment education; welfare, religious and nonprofit sectors and legal and engineering professions)	2,267	33.1
Wholesale and Retail Trades (includes food, bakery and dairy stores; eating and drinking establishments and general merchandise stores)	1,256	18.4
Public Administration (includes transportation, communication and utilities	1,544	22.6
Manufacturing (both durable and nondurable goods)	583	8.5
Finance, Insurance and Real Estate (includes banking and other credit agencies)	554	8.1
Construction	380	5.6
Agriculture, Forest and Fisheries	242	3.5
Mining	15	0.2
Total All Industries	6,841	100.0

Source: U.S. Department of Labor, 1970 Census

o Black

The Black population for Marin County is 4,964, ranking it seventh regionally. Blacks comprise 23.9% of the total minority population for the county and 1.4% of the total Black population for the region. Blacks in Marin County are concentrated in Marin City just west of U.S. Route 101 as this is the location of the county's only concentration of low-income public housing. There is also a small concentration at Hamilton Air Force Base.

o Chinese

The Chinese population for Marin County is 1,007, ranking it sixth regionally. The Chinese population comprises 4.8% of the total minority population for the county and 1.0% of the total Chinese population for the nine-county region. There is one population cluster in Marin County, located in North San Rafael.

o Japanese

The Japanese population for Marin County is 1,174, ranking it sixth regionally. It comprises 5.7% of the total minority population for the county and 2.3% of the total Japanese population for the region. There are two small Japanese clusters in Marin County, located in Tamalpais Valley and Mill Valley.

o Filipino

The Filipino population for Marin County is 465, ranking it seventh regionally. The Filipino population comprises 2.2% of the total minority population for the county and .9% of the total Filipino population for the region. There is one Filipino population cluster for Marin County at Hamilton Air Force Base.

Population Growth and Spatial Trends (1990)

Although Marin County's total population is forecasted to increase to between 232,218 and 251,398 by 1990, its minority populations will remain relatively small. The largest minority group, Spanish heritage, is expected to range between 20,840 and 20,174 by 1990, while the Black population is forecasted to reach nearly 6,000 and the Asian population is forecasted to range from 2,458 to 2,661 (Table 47).

Table 47

Marin County

Minority Population Profile 1950 to 1990

Year		Minority: Spanish Heritage	Black	Asian*	Total
1950		426	4,257	306	85,619
1960		6,852	4,070	972	146,820
1970		12,021	4,964	2,181	206,040
1990	Case 1	15,961	6,056	2,661	251,398
	Case 2	14,295	5,595	2,458	232,218

* Projections for Asian category consist only of Chinese & Japanese populations.

The settlement area of the Spanish heritage group is projected to cover nearly two square miles by 1990, with the greater part of its expansion centered in the city of San Rafael. The population projection for Marin County shows an increase of 8153 to 9819 Spanish-heritage persons from 1970 to 1990. Although projections are not sensitive to population densities under 2000 per square mile, there is evidence that a new Spanish heritage settlement pattern is developing in the vicinity of Novato and Hamilton Air Force Base. This development should be clearly evident by 1990 (Table 48).

The only major Black population cluster in the county is centered in Marin City. The settlement area is forecasted to cover about one square mile by 1990, with little change in settlement patterns. Marin City is located on the margin of the northwest route U.S. 101 and can be viewed as a prime location for development because of the county's relative shortage of developable land which is accessible to the highway and linked to the City of San Francisco. Development has occurred just west of Marin City, and a shopping center is planned just to the east of the city. If Marin City responds to this pressure on both sides by transforming into a residential area compatible with the adjacent development, its Black identitity will be lost. If this change does occur, the Black population would probably resettle in the Novato area or in the flatlands.

In 1970 the Asian population in the county was so small in number and so dispersed that it was difficult to identify any major concentrations. Future Asian settlement will continue to be dispersed throughout the county, and by 1990 Asian population is expected to be so dispersed that it will be impossible to identify any areas settled predominantly by Asians.

Transportation Needs Analysis

Demographic Profile of Respondents

Through the meetings at San Rafael and Marin City and the further community outreach assistance provided by community agencies, the overall respondents were 59% Spanish, 6% Chinese, 6% Japanese and 6% Black. Fifty-nine percent of the respondents are unemployed, and 47% have yearly incomes below $7000.00. Sixty-five percent of the respondents are female, and 41% of the respondents report five or more household members. Forty-five percent of the group reported completing some college.

Travel Mode

Only 16% of the respondents use public transportation for the journey to work, while 63% use automobiles. More than 80% use automobiles for travel to medical facilities and when shopping for groceries, and the automobile is the dominant travel mode for all other trips as well (social services, recreation, religious and social visits). The highest useage of public transit as a travel mode occurs for trips to social service agencies (Table 49).

Table 48

SQUARE MILES IN POPULATION DENSITY CATEGORIES

San Francisco Bay Region

MARIN COUNTY	Density Category 64,000	32,000	16,000	8,000	4,000	2,000	All Categories
Spanish Heritage							
1990					.3750	1.6250	2.0000
1970					(.0625) .3125	(.6250) 1.000	1.3125
1960					(.2500) .0625	(.7500) .2500	.3175
1950					(.0312) .0303E	(.1875) .0625E	.0938
Black							
1990				.0938	.3125	.3125	1.0938
1970				(.0313) .0625	(.1250) .1875	(.0625) .2500	.5000
1960				(.0000) .0625	-(.0625) .2500	-(.1875) .4375	.7500
1950				-(.0625) .1250	(.1250) .1250	(.0625) .3750	.6250
Oriental							
1990							
1970							
1960							
1950							

E = estimate

Numbers in parenthesis indicate change in area between years.

Table 49

PRIMARY TRAVEL MODE CHOICE

MARIN COUNTY	TRAVEL MODE (Numbers in percentages)								
TRAVEL PURPOSE	DRIVE CAR	CAR PASSENGER	REGULAR BUS	DEMAND RESPONSE BUS	RAILROAD	BART	WALK	BICYCLE MOTORCYCLE	OTHER
WORK	47	16	16				6	6	
MEDICAL	59	23	12				6		
GROCERIES	53	29					12		
SOCIAL SERVICES	29	16	29		6		6		
RECREATION	35	16	6					6	
RELIGIOUS	40	12						6	
VISITING	41	23	16				16		

N = 17

Destinations

There is nearly an even split between San Rafael (in the county) and San Francisco (across the Golden Gate Bridge) as predominent work trip destinations. For medical services, most of the respondents travel most often to San Rafael, with secondary destinations of San Francisco, Corte Madera and Terra Linda. Most grocery shopping trips are centered in San Rafael and Corte Madera. San Rafael is also the destination of nearly all trips to social service agencies. The most widely dispersed trips are those for social visits, which range beyond the county. Trips for recreation are less widely dispersed than those for social visits but more widely dispersed than those for most other trip purposes (Table 50).

Alternate Travel Mode

Forty-seven percent of the Marin respondents indicate that they would use public transit for trips to work if it were available. Sixty-five percent of the respondents would choose public transportation as the travel mode for medical services, and 29% would prefer to use buses for social service trips. The automobile is the alternate travel mode preferred for grocery shopping, recreational trips and social visits (Table 51).

Reasons for Travel Mode Choice

For most types of travel, Marin County respondents report that their current choice of travel mode is based on the unavailibility of alternate modes and the inadequatey of the public transit system. Lowest cost is frequently reported as the reason for travel mode choices related to work and recreational trips (Table 52).

Transit Needs

It has been mentioned that the Novato area is the site of developing Black and Spanish heritage residential clusters; a similar trend is developing in the Canal area. It is necessary to provide transit that will link these areas with work places. There is concern that transit authorities have not fully addressed the problem of reverse commuting in the county: this problem needs immediate attention.

It was suggested that Marin City needs an additional point of access to buses or that bus stops should be established so that residents are not required to walk to a single loading point.

It was also mentioned that there is a need for some improvements in service and/or fare structure to be considered for low-income persons who must travel to San Quentin, where a significant number of the prison population is Black and Spanish heritage.

To meet some of the demands for intra-county travel for medical, shopping and social service trips, it was suggested that Golden Gate Transit buses might be utilized during off-peak hours. It was also suggested that some of the special transit needs might be met by organizing a mini-bus system, using volunteers drivers. Much of the county is rural, and there is a need for public transit in the rural areas to the west.

Table 50

TRAVEL DESTINATION

MARIN COUNTY	TRAVEL PURPOSE						
	WORK	MEDICAL	GROCERIES	SOCIAL SERVICES	RECREATION	RELIGION	VISITING
CITIES:							
Corte Madera	1	2	4				
Ignacio			1				
Kentfield	1						
Larkspur			1	1			
Marin City						1	1
Mill Valley							
Novato		1	1			1	1
Ross							2
San Anselmo			2		5		
San Francisco	3	2			1		1
San Rafael	4	5	5	11		5	4
Sonoma			1			1	
Terra Linda		2					
Tiburon	1	1	1		1		
County-Wide - 7					3		2
Outside of County - 15							1

Table 51

ALTERNATE TRAVEL MODE CHOICE

MARIN COUNTY	TRAVEL MODE (Numbers in percentages)								
TRAVEL PURPOSE	DRIVE CAR	CAR PASSENGER	REGULAR BUS	DEMAND RESPONSE BUS	RAILROAD	BART	WALK	BICYCLE MOTORCYCLE	OTHER
WORK	6	6	41	6					
MEDICAL		12	65						
GROCERIES	53	29					12		
SOCIAL SERVICES	12	12	29						
RECREATION	35	16	6					6	
RELIGIOUS		12	16						
VISITING	12	16	12						

N = 17

Table 52

MARIN COUNTY

REASONS FOR SELECTION OF TRAVEL MODE

	TRAVEL PURPOSE (Numbers in percentages)						
	WORK	MEDICAL	GROCERIES	SOCIAL SERVICES	RECREATION	RELIGION	VISITING
Only available mode	12	23	18	18		18	18
Inadequate bus service	12	23	18				
Convenience		6	12	18			
Least costly	18				18		
Inadequate bus routes & stops	6		12	12		29	29
No bus service			6		6		12
No weekend bus service					12	6	6
Personal preference	6	12			6		
Least travel time	12	6					
No car available		6					
Car required in work	6						
Safety consideration	6						
Inadequate room for groceries			12				

N=17

Suggestions to Meet Transit Needs

Responses to the question on how MTC might facilitate travel in the county clearly delineate two major actions. The first suggestion is that MTC organize car pools to partially resolve the county's transit problems. The second suggestion is that MTC provide more bus service routes and increase the number of bus stops so that service would be easily accessible to the county's transit-dependent population (Table 53).

Conclusions and Recommendations - Marin County

The following are concerns and issues expressed by the respondents of Marin County regarding transit services, accompanied by recommendations for solutions to those stated needs.

Issue

o No transit service

Recommendations

- Expand existing bus services to all parts of Marin County.
- Organize car pools.
- Establish bike lanes on public highways.
- Provide transit service in the Novato and "Canal" areas.
- Provide transit service in the rural western reaches of the county.
- Extend BART to Marin County.

Issue

o Inadequate transit service

Recommendations

- Improve existing bus services.
- Increase the number of bus stops.
- Provide demand responsive system.

Issue

o Unreliable transit service

Table 53

WAYS MTC CAN FACILITATE TRAVEL

MARIN COUNTY	TRAVEL PURPOSE (Numbers in Percentages)						
	WORK	MEDICAL	GROCERIES	SOCIAL SERVICES	RECREATION	RELIGION	VISITING
Organize car pools	18	18	18			12	12
Provide more buses		12		12	6		23
Provide weekend service					6	6	
Increase bus stops	6	6					
Establish bike lanes on highway				18			
Expand bus service	6	6			6		
Improve bus scheduling			6				
Provide community vans		6					
Provide demand response buses			6				
Improve safety on buses				6			
Provide emergency bus service		6					

N = 17

Recommendation

- Improve bus scheduling.

Issue

o Lack of transit service in off-peak periods

Recommendations

- Provide weekend bus service.

- Provide evening bus service.

- Use Golden Gate Transit equipment and mini-buses with volunteer drivers to address specific transit needs, particularly for shopping and medical trips.

Issue

o Inadequate transit (bus) stops

Recommendation

- Increase number of bus stops.

Issue

o No space for groveries

Recommendation

- Design bus interiors to accommodate grocery parcels.

Issue

o High fares

Recommendation

- Reduce transit fares.

Issue

o Inconvenient transit service

Recommendation

- Provide an additional entrance and exit for Marin City so that transit service is available to a greater area, thus reducing excessive walking distances to bus stops.

Issue

o Inadequate transit safety

Recommendation

- Provide security guards on buses.

VII. NAPA COUNTY

County Description and Overview

One of the original 27 California counties, Napa County was incorporated in February of 1850. The county seat is the city of Napa. Spanish explorations date as far back as 1823, with an influx of United States settlers beginning in the 1840's. "Napa" is an Indian name, variously interpreted to mean "homeland," "abundant," or "grizzly bear." Napa County encompasses 787 square miles and is an area of mountain ranges surrounding narrow valleys, the most productive being Napa Valley. The county is characterized by warm summers, mild winters and a long growing season. Napa County is famous for its abundant and high-quality wine grapes and sustantial dairy and livestock products.

The combined Spanish-heritage, Asian and Black population of Napa County as of 1970 was 7,131 or 9.0% of the total county population of 79,140. Napa County is a sparsely populated, mainly rural area and it ranks ninth among the nine counties of the Bay Area for both minority population and total county population. The largest minority population concentration is Spanish-heritage (5,954), comprising 83.5% of the county's combined Spanish-heritage, Black and Asian population. The Black population is 507 persons and the Asian population is 670 (Table 54).

Table 55 shows the number of minorities employed in various industries in Napa County. Industries are ranked in order of the greatest number of minorities employed.

Contemporary Residential Patterns (1970)

o Spanish heritage

The Spanish-heritage population (5,954) comprises 78.3% of the total minority population for Napa County, yet it ranks last (ninth) in terms of total Spanish-heritage population for the region. The Spanish-heritage population for Napa County comprises 1.0% of the total Spanish-heritage population for the nine-county region. There are four Spanish-heritage clusters identified for Napa County. They are located in or near the cities and towns of Calistoga, Anqwin, St. Helena and Napa. The Spanish-heritage clusters are more dispersed and much smaller than for the other Bay-Area counties, due to the fact that the northern counties tend to be dominated by agricultural activities in contrast to the heavily industrialized South Bay counties.

o Black

The Black population (507) comprises 6.7% of the total minority population for Napa County, ranking it 9th for the region. It comprises less than 1% of the total Black population for the region. There are no identified clusters of Black population in Napa County.

o Chinese

The Chinese population for Napa County is 285, which is 3.8% of the total minority population for the county. The Chinese population of Napa County comprises

Table 54

NAPA COUNTY POPULATION 1970

	POPULATION GROUP					
	SPANISH HERITAGE	BLACK	CHINESE	JAPANESE	FILIPINO	OTHER*
Total Minority Population by Group	5,954	507	285	199	186	469
Percent of Total Minority Group by County as Compared to Regional Total by Minority Group	1.0	.1	.2	.3	.3	1.1
Percent of Total County Population	7.5	.6	.4	.3	.2	.6
Percent of Total Minority Population for County	78.3	6.7	3.8	2.6	2.4	6.2
Percent of Total Nine-County Population	.1	**	**	**	**	**
Percent of Total Nine-County Minority Population	.5	**	**	**	**	**

*Other includes Native American, Hawaiian and all other minorities not specifically mentioned in this report.

**Less than one-tenth of a percent.

Table 55

NAPA COUNTY MINORITY EMPLOYMENT

Industry	Number Employed	Percent
Service (includes business and repair services; private households and other personal services; entertainment and recreation; medical services; nongovernment education; welfare, religious and nonprofit sectors and legal and engineering professions)	801	32.7
Wholesale and Retail Trades (includes food, bakery and dairy stores; eating and drinking establishments and general merchandise stores)	384	15.7
Manufacturing (both durable and nondurable goods)	543	22.1
Public Administration (includes transportation; communication and utilities)	235	9.6
Finance, Insurance and Real Estate (includes banking and other credit agencies)	33	1.3
Construction	121	4.9
Agriculture, Forest and Fisheries	205	8.4
Mining	———	———
Total All Industries	2,452	100.0

Source: U.S. Department of Labor, 1970 Census.

less than one percent of the total population for Napa County and .2% of the total Chinese population for the region. As with the other population groups, they are scattered and very sparse, ranking ninth (9th) for the region. There are no identified Chinese population clusters in Napa County.

o Filipino

The total Filipino population for Napa County (186) comprises 2.4% of the total minority population for the county. The Filipino population for Napa County comprises .3% of the total Filipino population for the nine-county region. There are no identified Filipino population clusters in Napa County.

o Japanese

The Japanese population for Napa County, which is 199, comprises 2.6% of the total minority population for the county and 0.3% of the total population. There are no identified Japanese population clusters in Napa County.

Population Growth and Spatial Trends (1990)

Napa County's annual population growth rate between now and 1990 is forecasted to range between 0 and 1.3 percent. (Table 17 on p. 51. Napa County is a rural county with low population densities and none of the minority population clusters have population densities that exceed 2000 people per square mile (the lower threshold for projected use in this study). Therefore it is not possible to spatial project the settlement pattern (Table 57).

Table 56

Napa County

Minority Population Profile 1950 to 1990

		Minority			
		Spanish Heritage	Black	Asian*	Total
1950		26	408	345	46,603
1960		903	552	421	65,890
1970		5,954	507	484	79,140
1990	Case 1	8,215	656	626	102,458
	Case 2	6,929	571	545	90,300 1/

1/ 1975 total population ABAG "Provisional Series 3 Projections"

*Projections for Asian Category consists only of Chinese and Japanese population.

The Spanish-heritage population which is forecasted to increase to approximately 9000 by 1990 as indicated by Table 56 will still be located in the cities of Calistoga, Anqwin, St. Helena and Napa, the patterns identified in 1970. There will also be slight additions to the rural settlement pattern which are detailed on 1;62500 scale 1970 county dot map.

Table 57

SQUARE MILES IN POPULATION DENSITY CATEGORIES

SAN FRANCISCO BAY REGION

NAPA COUNTY	Density Category 64,000	32,000	16,000	8,000	4,000	2,000	All Categorie
Spanish heritage							
1990							
1970						.3125	.3125
1960							
1950							
Black							
1990							
1970						.1875	.1875
1960							
1950						.1250	.1250
Asian							
1990							
1970							
1960							
1950							

Blacks and Asians together by 1990 are forecasted to number approximately 12,000 making it nearly impossible to project future settlement patterns for a population so small.

Transportation Needs Analysis

Demographic Profile of Respondents

Three meetings were held in Calistoga, St. Helena and the city of Napa and through further outreach assistance by community agencies, the overall respondents were 98% Spanish heritage. The representation from these three locations amounts to 87% of those responding to the questionnaires. Fifty-eight percent of the sample population have households which exceed five, with 48% of the respondents being women. Fifty-five percent reported annual family incomes of less than $7000.00 and 62% reported having less than a high school education. Twenty-four percent of the group had difficulty seeing, 8% had impaired hearing and 10% had difficulty walking.

Travel Mode

The automobile dominates as the travel mode for all seven trip types considered, ranging from a low of 81% usage for social service trips to a high of 94% for recreational trips. The use of the automobile as a mode of travel is one of the highest for all counties considered in this study (Table 58).

Destinations

Work and medical trip destinations for Napa County are distributed over eight and nine locations respectively. The central locus for work trips is Napa, with Rutherford serving as a secondary center. The central location for medical services is St. Helena, with Napa being the secondary loci. Grocery shopping trips also center in these two cities, but in reverse order, with Napa being the dominant center. A similar pattern exists for social service trips and travel to religious services. Recreational trips and social visits, on the other hand, are more dispersed, with chosen distinations ranging over 14 and 16 locations respectively. Destinations for these two types of travel are out of the county, and in many instances, out of the nine-county region (Table 59).

Alternate Travel Mode

Respondents were asked what their secondary, or alternate, travel mode choice would be for all types of travel. The greatest number of responses indicated that, if available, public transit (both regular and demand response buses) would be considered the best alternate travel mode. For all trip categories, the request for public transit as an alternate travel mode was greatest (ranging from 30% to 41% of the responses). The only exception was travel to religious services, where 22% of the respondents chose public transit as a feasable alternate travel mode (Table 60).

Reasons for Travel Mode Choice

The greatest number of respondents stated that their choice of travel mode (most often the car) was determined by the lack of other available modes. This was most often

Table 58

PRIMARY TRAVEL MODE CHOICE

NAPA COUNTY	TRAVEL MODE (Numbers in percentages)								
TRAVEL PURPOSE	DRIVE CAR	CAR PASSENGER	REGULAR BUS	DEMAND RESPONSE BUS	RAILROAD	BART	WALK	BICYCLE MOTORCYCLE	OTHER
WORK	67	26	2			1	2	1	
MEDICAL	64	29	3	1			3		
GROCERIES	68	23	2				7		
SOCIAL SERVICES	49	32	7				4		
RECREATION	67	27	2	1			2		
RELIGIOUS	66	21	4	1			12	1	
VISITING	68	15	3	1			11	1	

Table 59

TRAVEL DESTINATION

NAPA COUNTY	TRAVEL PURPOSE						
	WORK	MEDICAL	GROCERIES	SOCIAL SERVICES	RECREATION	RELIGION	VISITING
CITIES:							
Berkeley			1				1
Calistoga	5	1	3	2	2	2	3
Fairfield	3		1			3	1
Healdsburg					1		
Lakeport				1			1
Martinez					1		
Napa	35	29	41	45	14	18	18
Oakland		1		1	2		2
Oakville	2						
Pittsburg	1				1		1
Rutherford	14	9	3	1		1	1
Sacramento							1
St. Helena	11	39	22	15	9	47	13
San Francisco		1			14		5
Santa Rosa		1	1		6		2
Stockton					2		
Vallejo		4	1				
Yountville	3	2				10	1
County-Wide	2			1	2		3
BayArea					2		2
Outside Region					3		14

Table 60

ALTERNATE TRAVEL MODE CHOICE

NAPA COUNTY	TRAVEL MODE (Numbers in percentages)								
TRAVEL PURPOSE	DRIVE CAR	CAR PASSENGER	REGULAR BUS	DEMAND RESPONSE BUS	RAILROAD	BART	WALK	BICYCLE MOTORCYCLE	OTHER
WORK	22	22	27	7			4	1	
MEDICAL	14	27	32	9			7		
GROCERIES	22	18	25	7			11	1	
SOCIAL SERVICES	20	15	27	3			8	2	
RECREATION	12	14	34	3			5	1	
RELIGIOUS	19	14	22				11		
VISITING	18	10	34				9		1

N - 91

Table 61

NAPA COUNTY

REASONS FOR SELECTION OF TRAVEL MODE

	TRAVEL PURPOSE (Numbers in percentages)						
	WORK	MEDICAL	GROCERIES	SOCIAL SERVICES	RECREATION	RELIGION	VISITING
Only available mode	34	34	33	33	29	26	23
No bus service	14	29	16	19	15	19	20
Inadequate bus routes & stops	8	18	9	7	5	3	11
Convenience	7	11	10	3	5	2	4
Inadequacy of buses	3	4	4	5	8	2	5
Least costly		1	2	3	8	2	9
Do not drive	7	1	4	4	2	3	2
No car available	4	2	1	1	2	1	2
No weekend bus service		2	1		4	11	
Least travel time	5	1			2	2	1
Public transportation unreliable		1	3	3	1	1	1
Car required in work	4		2	1			
Language barrier	1		2				
No early morning bus service	2						

N=91

related to non-existent or inadequate transit systems. Another factor is that the automobile is less costly and more time efficient than other travel modes (Table 61).

Transit Needs

Napa County is a low density county in which the population is widely dispersed. This calls for a comprehensive transit system which utilizes non-conventional transit modes.

Community based, non-conventional transit services need to be developed, particularly for special transit needs related to work, shopping, medical and social services, and social and cultural trips. There is a need to establish an effective transit network between Calistoga-St. Helena-Napa, the centers of Spanish-heritage population, as well as the adjacent counties of Sonoma and Solano.

The need for transit service for minorities, low-income residents, farmworkers, and increased transit services for the elderly and handicapped was also stressed at an MTC Public Hearing held in Napa County on Thursday, May 11, 1978.* The purpose of the public hearing was to receive public testimony on whether "unmet transportation needs" exist in Napa County. This information will be used by MTC in making a determination on whether "unmet transportation needs" exist and how Transportation Development Act (TDA) funds ought to be allocated to Napa County. TDA funds, State monies allocated by MTC for transit improvements, can be reallocated for road improvements in such counties as Napa, if the county makes a finding that public transportation needs are being met. MTC must consider all of these issues and must determine that local government is doing its "reasonable" best to promote public transit before allowing TDA monies to be spent on road improvement. If MTC determines that there are unmet public transit needs, it can then withhold allocation for TDA funds until those needs are met.

Petitions consisting of 862 names requesting that 100 percent of this years TDA funds be allocated to transit were presented by the President of the Napa-Solano Chapter of the Counseling Association of Physically Handicapped in representing the concerned citizens for the unmet transportation needs of low-income, elderly, and handicapped persons of Napa County.

Some public officials also provide testimony and specific mention was made of the inadequate interface between the North Bay Counties. It was further mentioned that transit systems in most communities are designed for the commuter, for the white collar worker who commutes from the suburbs to jobs in the metropolitan cities. One of the major concerns is for the minority population who live in cities or rural communities where transit systems do not exist due to the high cost.

The large Spanish-heritage population in Napa County clearly indicated a need for bi-lingual transportation personnel as well as for bi-lingual transit information and signs. When English is the only language through which information on transit services can be obtained, problems often are created for the Spanish speaking population.

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* Information pertaining to the MTC TDA Public Hearing on Napa County was obtained from the MTC Reporter's Transcript of Proceedings dated May 11, 1978.

Aside from the MTC TDA Public hearing, specific responses through questionnaires collected through MTNAP community meetings and by social service agencies clearly indicated several transit needs. In traveling to work, particularly the agricultural work sites, there was a need for some type of commute transit service. Concerns were expressed over the fact that Greyhound did not provide adequate scheduling for taking and bringing the worker in the morning and evening.

The need for transit service to be provided through a reduced or no fare means was also mentioned as necessary, because Greyhound fares of $3.69 round trip between Calistoga and Napa were too high. A daily usage of Greyhound for going to work, even with improved scheduling, would be far too costly and inadequate for the agricultural worker and low-income population . A major area of concern regarding the need for a subsidized transit service was expressed regarding the present County Board of Supervisors policy of excluding low-income populations from subsidized transit service.

One other area of need that was expressed through the MTNAP meetings was the request for adequate service for traveling significant distances to receive medical or social services as well as shopping for groceries.

Suggestions to Meet Transit Needs

To the request for input as to how MTC could facilitate their travel in Napa County, the greatest number of respondents expressed a desire for expanded existing bus services in Napa County. The second largest number of responses requested that existing bus services be made more reliable. Every response to this question was tied in some way to MTC's providing a comprehensive and adequate transit system for the county's minorities (Table 62).

Conclusions and Recommendations - Napa County

As discussed in the needs section, there are pressing unmet transit needs in the county of Napa. The following are concerns and issues expressed by the respondents of Napa County accompanied by recommendations for solutions to those needs.

Issue

o No transit service

Recommendations

- Extend and improve existing bus routes.
- Extend BART to Napa County.
- Organize car pools.
- Provide commuter rail services.
- Establish a transit system which links Sonoma and Napa counties.

Table 62

WAYS MTC CAN FACILITATE TRAVEL

TRAVEL PURPOSE
(Numbers in Percentages)

NAPA COUNTY	WORK	MEDICAL	GROCERIES	SOCIAL SERVICES	RECREATION	RELIGION	VISITING
Expand existing bus service	42	41	41	47	48	38	47
Provide reliable bus service	27	22	21	20	18	19	21
Improve bus schedules	12	11	8	7	3	3	9
Provide mini-bus service		8	5	4	3	5	3
Provide low cost transportation	1	3		2	5	2	2
Provide rail service	1	1	1	2	1		2
Provide Sunday bus service		1		1		5	
Make bus more safe and comfortable		1	2	1	1	1	
Provide buses for transit to medical services		4		2			
Provide buses for shopping			4				
Provide emergency bus service	1	1				1	1
Provide demand response service	1		1	1		1	
Extend BART to the county					2		
Provide for recreational trips					3		
Organize car pools		1		1		1	
Provide bilingual		1		1	1	1	

- Expand the Greyhound bus system and improve its service.

- Establish a Calistoga-St. Helena-Napa transit network.

Issue

o Unreliable transit service

Recommendations

- Provide mini-bus or other non-conventional transit systems to meet residents' needs.

Issue

o Slow transit service

Recommendation

- Improve bus scheduling.

- Provide bi-lingual transit personnel to facilitate the travel of non-English speaking transit users.

Issue

o Lack of transit services in off-peak periods

Recommendations

- Provide Sunday bus service.

- Provide late night and early morning service.

Issue

o High fares

Recommendation

- Decrease transit fares (including Greyhound fares).

Issue

o Inconvenient transit services

Recommendation

- Improve existing bus services.

- Improve Greyhound scheduling.

Issue

o Lack of bi-lingual personnel

Recommendation

- Provide bi-lingual transit operators and information personnel.

Issue

o Uncomfortable transit vehicles

Recommendation

- Design buses (seating) to improve passenger comfort.

Issue

o Inadequate transit to recreation sites

Recommendation

- Provide direct transit access to selected recreational sites.

Issue

o Inadequate transit service to medical facilities

Recommendations

- Provide community vans to medical facilities.
- Provide a demand response system for travel to medical appointments.

VIII. SAN FRANCISCO COUNTY

County Description and Overview

San Francisco County is one of the original 27 counties of California. When San Mateo County was created from part of San Francisco County in 1856, the City and County of San Francisco consolidated their governments, forming a type of government unique in the state. Although the vessel San Carlos dropped anchor in the San Francisco Bay in 1775 and the Mission of San Francisco de Asis was founded in 1776 by Father Junipero Serra, the first village settlement of Yerba Buena (San Francisco) was not established until 1834. San Francisco officially received it's name in March of 1847 and was incorporated in February of 1850. The first official American representative of San Fancisco was a man of Black-Danish ancestry: William Alexander Leidesdorff, who was appointed as U.S. Vice Consul in 1845.

San Francisco's central business district was destroyed by earthquake and fire in 1906, but was quickly rebuilt, and by 1910 San Francisco had a population of 416, 912. Today the City and County of San Francisco comprises 45 square miles with a population of 706,532. It occupies the northern tip of the San Mateo Peninsula, a narrow hilly strip of land which extends southward from the Golden Gate between the Pacific Ocean and San Francisco Bay. Near the center of the city is a cresent-shaped range of hills, with Twin Peaks, Mt. Davidson, and Mt. Sutro all over 900 feet. Other hills such as Nob Hill and Russian Hill are close to the city center. San Francisco County is one of the top manufacturing counties in the region, and is a center for food processing, shipping and receiving, and for apparel and textile industries. It also has printing and publishing houses, metal fabricating firms and chemical manufacturers.

San Francisco ranks third in terms of total population (706,532) and second for total minority population for the region. The combined Spanish-heritage, Black and Asian population is 293,811 or 41.6% of the total county population. The largest population concentration is Spanish heritage (101,901), followed by Asian (96,181) and Black (95,729). (Table 63.)

Table 64 shows the number of minorities employed in various industries in San Francisco County. Industies are ranked in order of the greatest number of minorities employed.

Contemporary Residential Patterns

- o Spanish heritage

San Francisco's Spanish-heritage population (101,901) is the third largest for the region, comprising 33.6% of the total minority population for the county and 17.3% of the total Spanish heritage population for the region. This population group is regionally distributed more widely than any of the other minority distributions being considered. The identified Spanish-heritage population clusters are respectively, the Inner and Outer Mission Districts, the South of Market District and Bayview.

Table 63

SAN FRANCISCO COUNTY POPULATION 1970

	POPULATION GROUP					
	SPANISH HERITAGE	BLACK	CHINESE	JAPANESE	FILIPINO	OTHER*
Total Minority Population by Group	101,901	95,729	58,757	12,364	25,060	9,473
Percent of Total Minority Group by County as Compared to Regional Total by Minority Group	17.3	26.2	60.5	23.8	46.1	21.6
Percent of Total County Population	14.4	13.5	8.3	1.7	3.5	1.3
Percent of Total Minority Population for County	33.6	31.5	19.4	4.1	8.3	3.1
Percent of Total Nine-County Population	2.2	2.1	1.2	.2	.5	.2
Percent of Total Nine-County Minority Population	8.5	8.0	4.9	1.0	2.1	.8

*Other includes Native American, Hawaiian and all other minorities not specifically mentioned in this report.

**Less than one-tenth of a percent.

Table 64

SAN FRANCISCO COUNTY MINORITY EMPLOYMENT

Industry	Number Employed	Percent
Service (includes business and repair services; private households and other personal services; entertainment and recreation; medical services; nongovernment education; welfare, religious and nonprofit sectors and legal and engineering professions)	34,802	28.2
Wholesale and Retail Trades (includes food, bakery and dairy stores; eating and drinking establishments and general merchandise stores)	25,482	20.7
Manufacturing (both durable and nondurable goods)	16,713	13.6
Public Administration (includes transportation; communication and utilities)	14,769	12.0
Finance, Insurance and Real Estate (includes banking and other credit agencies)	12,350	10.0
Construction	4,216	3.4
Agriculture, Forest and Fisheries	905	0.7
Mining	188	0.2
Total All Industries	123,242	100.0

Source: U.S. Department of Labor, 1970 Census.

o Black

The Black population of San Francisco County (95,729) is second largest on a regional basis. Blacks comprise 31.6% of the total minority population of the county and 26.2% of the total Black population for the nine-county region. The identified Black population clusters for San Francisco County, although smaller in size on the average, are better known. Blacks in San Francisco are largely concentrated in the Fillmore-Western Addition District and at Hunters Point. Ingleside on the City/County southern border and the Potrero Districts are other areas with significant Black population clusters.

o Chinese

San Francisco County has the largest Chinese population for the Nine-County Bay Area (58,757) comprising a little more than 60% of the total Chinese population for the region. Chinese comprise 19.4% of the total minority population for San Francisco County. The largest number are concentrated in Chinatown and a smaller number reside in the Richmond-Sunset District.

o Japanese

The Japanese population for San Francisco County (12,364) ranks it second in size for the region. Japanese comprise 4.1% of the total minority population for the nine-county region. Thre are two identified Japanese population clusters, Japantown and the Richmond-Sunset District.

o Filipino

The Filipino population for San Francisco County is 25,060, making it first in size for the region. It constitutes 46.1% of the total Filipino population for the nine-county bay area and 8.3% of the total minority population for San Francisco. The major identified clusters are located in the western and southern portions of the Inner Mission District, with smaller concentrations in the Outer Mission and South of Market District.

Population Growth and Spatial Trends (1990)

San Francisco is the only county in the region to have a negative population forecast, reflecting the coincidence of city and county boundaries and a pattern of movement of population away from the central urban core to outlying areas of the region. It is forecasted that the total population of the city and county will range between 641,000 and 645,100 by 1990, representing a loss of 64,000 when compared to the 1970 population. Although the county's overall population will decrease, its minority population is forecasted to increase at a rate at least equal to the regional annual growth rate, which is between .6% and 1.0% (Table 17.)

Table 65

San Francisco County

Minority Population Profile 1950 to 1990

Year		Minority: Spanish Heritage	Black	Asian*	Total
1950		12,478	43,502	30,932	775,375
1960		68,553	74,363	45,909	740,316
1970		101,901	95,729	71,121	706,532
1990	Case 1	193,993	116,803	86,778	641,900
	Case 2	179,192	107,892	80,157	645,100

*Projections for Asian category consist only of Chinese and Japanese population.

The county's total population has been decreasing since 1950, as shown by Table 65. Much of this decrease can be accounted for by the flight to the suburbs which is common to the American urban scene during recent history. A related factor is the pressure for space, since the City and County of San Francisco is confined to a 45-square-mile area and has no opportunity for expansion.

The Spanish-heritage population, which is the county's largest minority group, will reach between 136,902 and 122,101 by 1990. The Black population is expected to range between 107,892 and 116,803 by 1990, and the Asian population, which is the largest Asian population in the Bay Region, will exceed 80,000 persons.

Table 66 indicates that the county's Spanish-heritage population was settled in an area of 17.4 square miles in 1970. By 1990 it is projected to increase only slightly, to an area of 17.6 square miles, with little shift in the locations of the settlement clusters identified in 1970. However, there will be changes in population densities. By 1990, nearly eight square miles of the Spanish-heritage settlement will have population densities in excess of 4,000 persons per square mile. The Mission district will remain the major axis of Spanish-heritage settlement in San Francisco

The county's Black settlement area is projected to increase in size by four square miles by 1990, when 13.4 square miles are projected for Black settlement. As in the case of Spanish heritage settlement patterns, Black settlement patterns will not have shifted significantly by 1990. Hunter's Point, Ingleside and the Fillmore District will continue to be centers of Black settlement.

The Asian settlement patterns will increase slightly in area by 1990, adding approximately .2 square miles. However, there will be noticeable shifts in settlement

Table 66

SQUARE MILES IN POPULATION DENSITY CATEGORIES

SAN FRANCISCO BAY REGION

SAN FRANCISCO COUNTY	Density Category 64,000	32,000	16,000	8,000	4,000	2,000	All Categories
Spanish heritage							
1990					7.9375	9.6250	17.5625
1970					(1.9375)	(3.5625)	
		.0625	2.0625	3.1875	6.0000	6.0625	17.3750
1960					(5.6250)	(4.1250)	
					.3750	1.9375	2.3125
1950					(.1875)	(1.5000)	
					.1875E	.4375	.6250
Black							
1990				2.8750	4.1250	6.375	13.3750
1970				(.8750)	(1.875)	(3.2500)	
		.0625	1.6250	2.000	2.2500	3.1250	9.0625
1960		(0)	(.5625)	(.3750)	(.2500)	(.5675)	
		.0625	1.0625	1.6250	2.0000	2.5625	7.3125
1950		(0)	(.2500)	(.875)	(1.000)	(1.3125)	
		.0625	.8125	.7500	1.0000	1.2500	3.8750
Asian							
1990				.5000	1.3125	4.8750	6.6875
1970				-(.1875)	-(.5000)	(1.625)	
	.1250	.2500	.3125	.6875	1.8125	3.2500	6.4375
1960		(.1875)	(.0675)	-(.3750)	(.7500)	(.8450)	
		.0625	.2500	1.0625	1.0625	2.4050	4.8425
1950	(0)	(.1875)	(.1250)	(.0675)	(1.4050)		
		.0625	.0625	.5000	1.0000	1.0000	2.625

E = Estimate

*-Numbers in parenthesis indicate change in area between years.

population increased by 1970, the settlement area in the southeastern part of the city and county had disappeared, reducing the number of Asian settlement clusters. By 1990 China and Japan towns will remain as centers of Asian population, and the Wester Addition-Richmond District will become an Asian district. Again it should be noted that Asians who reside outside of these districts are becoming so dispersed that it is increasingly difficult to identify them as a population cluster.

Transportation Needs Analysis

Demographic Profile of Respondents

Through a meeting and further outreach assistance by community agencies, the overall respondents who completed questionnaires were 34% Chinese, 20% Spanish heritage, 18% Black, 11% Japanese, 9% Filipino, and 8% others consisting of Korean, Vietnames and Samoan. Unemployment among the respondents was reported to be 25% and 31% have incomes of less than $7,000.00. The median age for the overall group was 35 and a large number have some college education.

Travel Mode

The automobile is the dominant transit mode used for going to recreation (78%), social visits (75%), grocery shopping (65%), medical services (56%), and social services (39%). The respondents reported (42%) usage of cars for going to work and (23%) go by bus to work. The highest useage by bus for one of the trips is (42%) for going to medical services. BART is not heavily used by the respondents. It is interesting that walking is a mode frequently used for grocery shopping (Table 67.)

Destinations

For work, medical and grocery shopping trips, nearly all the respondents' trip destinations are within San Francisco. Most trips for other purposes also have destinations within San Francisco. Only in the categories of recreational trips and social visits does the destination pattern change. In these cases, while the majority of destinations is still witin the city, remaining trips are more regionally oriented (Table 68.)

Alternate Travel Mode

Respondents from San Francisco indicate that, for the most part, they would prefer public transit as the travel mode for most trips. (Table 69.)

Reasons for Travel Mode Choice

Convenience is the reason most often cited by respondents as to why they selected their current travel modes. This is followed by the consideration that the mode used is the most time efficient. This can be seen as a need for public transit as a travel mode. (Table 70.)

Table 67

PRIMARY TRAVEL MODE CHOICE

SAN FRANCISCO COUNTY	TRAVEL MODE (Numbers in percentages)								
TRAVEL PURPOSE	DRIVE CAR	CAR PASSENGER	REGULAR BUS	DEMAND RESPONSE BUS	RAILROAD	BART	WALK	BICYCLE MOTORCYCLE	OTHER
WORK	24	23	55	2	1	5	26	1	1
MEDICAL	35	22	59	2		1	20		1
GROCERIES	39	26	25	2		2	49	1	1
SOCIAL SERVICES	16	22	45	4			26	1	1
RECREATION	45	42	28	1	1	5	20	3	3
RELIGIOUS	20	20	19	2			19	1	1
VISITING	42	41	41	4		3	33	3	3

N = 101

Table 68

TRAVEL DESTINATION

SAN FRANCISCO COUNTY	TRAVEL PURPOSE (Numbers in percentages)						
	WORK	MEDICAL	GROCERIES	SOCIAL SERVICES	RECREATION	RELIGION	VISITING
CITIES:							
Alameda							1
Albany		1	1		1		1
Berkeley	2	1	1		3		2
Davis					1		1
Daly City	1	2	1	1	3		2
Marin					2		1
Oakland			2		5		3
Palo Alto							1
Richmond					1		
San Francisco	90	84	91	68	61	49	73
San Jose	1	1			2	1	3
San Mateo							2
San Rafael							1
Sausalito							1
County Wide	1						
Bay Area					8		1
Out of Region					15	1	6

Table 69

ALTERNATE TRAVEL MODE CHOICE

SAN FRANCISCO COUNTY	TRAVEL MODE (Numbers in percentages)								
TRAVEL PURPOSE	DRIVE CAR	CAR PASSENGER	REGULAR BUS	DEMAND RESPONSE BUS	RAILROAD	BART	WALK	BICYCLE MOTORCYCLE	OTHER
WORK	17	27		1		3	27	10	1
MEDICAL	12	39		3		3	21	3	4
GROCERIES	18	33		4		2	24	2	3
SOCIAL SERVICES	12	26		4			17	1	2
RECREATION	8	32		4	3	11	20	5	5
RELIGIOUS	4	24		4			20	1	1
VISITING	11	35		7	2	10	23	3	

N = 101

Table 70

REASONS FOR SELECTION OF TRAVEL MODE

SAN FRANCISCO COUNTY	TRAVEL PURPOSE (Numbers in percentages)						
	WORK	MEDICAL	GROCERIES	SOCIAL SERVICES	RECREATION	RELIGION	VISITING
Convenience	31	28	39	23	36	12	25
Least travel time	10	18	7	7	15	7	12
Only available mode	18	18	17	12	15	15	15
No car available	9	12	8	7	5	4	7
Least costly	13	3	1	4	4	1	4
Safety considerations	7	3		4	7	1	6
Personal preference	1	4	2	1	5	4	5
Limited parking available	7	3		4	4		
Car required in work	6						9
No direct bus service available	3						1
Proximity of destination		2	9	2		1	2
Mobility	1		5		5	1	1

Transit Needs

Most of San Francisco's transit needs are inter-city problems. It was suggested that transit in the city be expanded and that routes and schedules be adjusted to accommodate work trips. It was further suggested that a mini-buses or jitneys be allowed to operate in all districts to facilitate travel requirements and special transit needs. There is also concern about the number of missed bus runs in the city, and this issue needs to be examined before a positive action can be taken to resolve the problems. There is concern as well about problems caused by high rates of tourist use of public transit during work commute hours during the summer. It is apparent that tourist traffic does cause delays to city residents who use the transit system for work trips, where reliable transportation on a fixed schedule is a basic need.

Although the out-of-city commuter did not show up strongly on the survey, there is concern expressed for the problem of reverse commuters who work in Marin and San Mateo counties. To facilitate this travel, the transfer mechanism between the out-of-county carriers (Golden Gate Transit and SamTrans) and Muni need to be arranged so that transfer is not a burden for reverse commuters.

Suggestions to Meet Transit Needs

To facilitate journeys to work it was suggested that MTC provide better bus service overall in the city by increasing the number of bus stops and the express service to the financial district, as well as by changing the schedules to accommodate workers. Another suggestion is to improve BART service and to extend its hours of operation. More specifically, there are suggestions that conditions on public transit could be improved in terms of safety. For medical service trips, an additional suggestion was made that buses be routed directly to medical facilities and that service provisions be made for the handicapped. As for the grocery trip, it is suggested that special shoppers' buses be established. To facilitate recreational trips and social visits, the issue of bus comfort arises, as does the distribution of information on recreational opportunities accessible by public transit. It is also suggested that Sunday service on BART would expedite trips of these types (Table 71.)

Conclusions and Recommendations - San Francisco

San Francisco is better served by its transit system than any of the nine counties, with the exception of Alameda. Concerns were expressed, however, regarding issues such as transit safety and reliability of transit services. The following are recommendations for solutions to stated transit concerns and issues.

Issue

- o No direct transit service

Recommendations

- Provide more express buses from all parts of the city to the financial district.

WAYS MTC CAN FACILITATE TRAVEL

SAN FRANCISCO COUNTY	TRAVEL PURPOSE (Numbers in percentages)						
	WORK	MEDICAL	GROCERIES	SOCIAL SERVICES	RECREATION	RELIGION	VISITING
Provide better bus stops and scheduling	19	13	6	7	9	4	6
Increase bus services	23	17	11	8	15	9	16
Improve BART service	3	1	1	1	3	1	1
Provide lower fares	2	2			4	2	3
Povide more courteous transit drivers	3	2	2	2	2	2	2
Distribute brochures describing recreation areas and bus routes					7		
Provide bus to medical facilities		12					
Provide BART service on Sunday			2		2		2
Organize car pools		2			2		2
Provide shuttle buses	1		3	3	2		1
Provide special bus for shopping			8				
Provide more comfortable buses							4
Improve bus safety	1				1		
Provide services for the handicapped		2					4
Expand BART lines	2						
Provide more express buses from Financial District to outer areas	2						

- Provide shuttle buses between the major centers of activity.
- Organize car pools.
- Increase parking facilities and controls.
- Extend BART lines to additional parts of the county.
- Improve bus connections to San Jose.
- Extend BART to San Jose.

Issue

o Slow transit service

Recommendations

- Provide more express buses.
- Improve BART services and extend BART lines.
- Provide Sunday service on BART.
- Improve routes and scheduling.

Issue

o High fares

Recommendations

- Reduce bus fares.
- Reduce BART fares.

Issue

o Inconvenient transit service

Recommendations

- Provide more express buses.
- Improve the confort factor in seating.
- Survey the bus system in order to address the issue of missed runs.
- Assess the overburden of tourist demand on routes used for the journey to work.

- Assess the problem of reverse commuter.

- Facilitate an effective transfer system between Muni and the respective Golden Gate Transit (Marin County) and Sam Trans (San Mateo County) systems.

Issue

o Inadequate transit safety

Recommendations

- Provide better lighting at bus stops.

- Place security officers on buses.

Issue

o Inadequate transit services for the physically handicapped

Recommendations

- Provide a demand response service.

- Provide a mini-bus system geared to needs of teh handicapped.

- Provide buses equipped with wheelchair lifts.

Issue

o Uncomfortable transit vehicles

Recommendation

- Provide more comfortable bus seats.

Issue

o Inadequate transit service to shopping facilities

Recommendations

- Provide special buses for shoppers.

- Provide a mini-bus system geared to shoppers' needs.

- Change the law to accomodate jitney systems on streets other than Mission.

Issue

- o Inadequate transit service to medical facilities

Recommendations

- Provide demand response services to medical facilities.
- Provide mini-bus services to medical facilities.
- Change the law to allow jitney systems on streets other than Mission.

Issue

- o Discourteous transit personnel

Recommendation

- Improve driver courtesy wtih orientation and training programs.

IX. SAN MATEO COUNTY

County Description and Overview

San Mateo (St. Matthew) County was created in 1856 from territory originally part of San Francisco County. It was reorganized and enlarged in 1868 with territory added from Santa Cruz County. First explorations of what is now San Mateo County were made in 1769 by the Portola expedition, followed in 1776 by Anza. United States citizens arrived in the early 19th century and developed a thriving redwood lumber business in the area around Woodside. San Mateo County was incorporated in April of 1856. The county seat is Redwood City.

San Mateo County encompasses 446 square miles and occupies almost all of the rugged peninsula extending south from the Golden Gate except for the northern tip. Backbone of the peninsula is the Santa Cruz Mountains and their northern extensions, the Montara Mountains. Most of the mountain and foothill area is densely wooded, with redwood predominating. The San Andreas fault crosses the county from north to south. It is marked by a long, narrow valley containing several lakes. San Mateo County is a leading industrial area, particularly in electrical and nonelectrical machinery. Other large industries include primary metals, printing and publishing, food processing and various chemicals.

Regionally, San Mateo ranks fifth in terms of total county population (556,363) and fourth for total minority population (109,850). The combined Spanish-heritage, Black and Asian population for the county is 105,383 or 18.9% of the total county population. The largest minority population group is Spanish heritage (63,039). The Black population is 25,745 and the combined Asian population is 16,599 (Table 73.)

Table 74 shows the numbers of minorities employed in various industires in San Mateo County. Industries are ranked in order of the greatest number of minorities employed.

Contemporary Residential Patterns 1970

- Spanish heritage

The Spanish-heritage population for San Mateo County (63,039) ranks it fourth for the region. It comprises 57.4% of the total minority population for the county and 10.7% of the total Spanish-heritage population for the region. The largest Spanish-heritage population cluster for San Mateo County is in the Redwood City area, followed by smaller clusters in Daly City (East and West), South San Francisco, Linda Mar and the City of San Mateo.

- Black

The Black population for San Mateo County is 25,745, ranking it fourth regionally. Blacks comprise 23.4% of the total minority population for the county and 7.1% of the total Black population for the region. The major Black area in terms of population size is East Palo Alto, which is often referred to locally as "Nairobi." Other than Nairobi there are two concentrations in the county, one at Foster City and the second in Redwood City.

Table 72

SAN MATEO COUNTY POPULATION 1970

	POPULATION GROUP					
	SPANISH HERITAGE	BLACK	CHINESE	JAPANESE	FILIPINO	OTHER*
Total Minority Population by Group	63,039	25,754	5,051	5,609	5,939	4,467
Percent of Total Minority Group by County as Compared to Regional Total by Minority Group	10.7	7.1	5.2	10.8	10.9	10.2
Percent of Total County Population	11.3	4.6	.9	1.0	1.1	.8
Percent of Total Minority Population for County	57.4	23.4	4.6	5.1	5.4	4.1
Percent of Total Nine-County Population	1.4	.6	.1	.1	.1	.1
Percent of Total Nine-County Minority Population	5.2	2.1	.4	.5	.5	.4

*Other includes Native American, Hawaiian and all other minorities not specifically mentioned in this report.

**Less than one-tenth of a percent.

Table 73

SAN MATEO COUNTY MINORITY EMPLOYMENT

Industry	Number Employed	Percent
Service (includes business and repair services; private households and other personal services; entertainment and recreation; medical services; nongovernment education; welfare, religious and nonprofit sectors and legal and engineering professions)	11,862	26.9
Wholesale and Retail Trades (includes food, bakery and dairy stores; eating and drinking establishments and general merchandise stores)	8,687	19.7
Manufacturing (both durable and nondurable goods)	8,144	18.5
Public Administration (includes transportation; communication and utilities)	4,237	9.6
Finance, Insurance and Real Estate (includes banking and other credit agencies)	3,028	6.9
Construction	2,106	4.8
Agriculture, Forest and Fisheries	994	2.3
Mining	75	0.1
Total All Industries	4,054	100.0

Source: U.S. Department of Labor, 1970 Census.

o Chinese

The Chinese population for San Mateo County is 5,051, ranking it fourth regionally. Chinese comprise 4.6% of the total minority population for the county and 5.2% of the total Chinese population for the region. There is only one identified Chinese population cluster in San Mateo County - the City of San Mateo.

o Japanese

The Japanese population for San Mateo County is 5,609, ranking it fourth regionally. Japanese comprise 5.1% of the total minority population for the county and 10.8% of the total Japanese population for the region. There is one identified Japanese population cluster in San Mateo County - the City of San Mateo.

o Filipino

The Filipino population for San Mateo County is 5,939, ranking it fourth regionally. The Filipino population comprises 5.4% of the total minority population for the County and 10.9% of the total Filipino population for the region. San Mateo County has three Filipino population clusters, located in Daly City South, Daly City East and Pacifica.

Population Growth and Spatial Trends (1990)

With annual growth rates of .2% to .3%, San Mateo County will only experience moderate population growth to 1990, reaching a population ranging between 579,034 and 590,708. The Spanish heritage, Black and Asian populations will also reflect this trend with relatively small increases in population size (Table 74.)

Table 74

San Mateo County

Minority Population Profile 1950 to 1990

Year		Minority			
		Spanish Heritage	Black	Asian*	Total
1950		1,392	2,395	2,574	235,659
1960		25,557	10,846	6,002	444,389
1970		63,039	25,745	10,660	556,363
1990	Case 1	68,936	27,334	11,318	590,708
	Case 2	66,932	26,794	11,094	579,034

* Projections for Asian category consists of Chinese & Japanese population only.

The projected Spanish heritage settlement patterns will cover 14 square miles with a projected population between 99,438 and 101,442 by 1990. All of this area will have a population density within a lower limit of 2000 people per square mile. Expansion will occur in the Daly City area, South San Francisco, San Mateo and Redwood City. It is in these cities that the bulk of the one square mile areas to be added will be located. There will be little shift in projected pattern from that identified in 1970 (Table 75.)

Table 75

SQUARE MILES IN POPULATION DENSITY CATEGORIES

SAN FRANCISCO BAY REGION

SAN MATEO COUNTY	Density Category 64,000	32,000	16,000	8,000	4,000	2,000	All Categories
Spanish heritage							
1990						14.3125	14.3125
1970				.4375	2.3125	(3.7500) 10.5625	13.3125
1960						(10.375) .1875	.1875
1950						(.0625) .1250	.1250
Black							
1990					2.3750	2.8125	5.1875
1970				.2500	(.3125 2.0625	(.6875 2.1250	4.4375
1960				(.0625)* .1875	(1.2500) .8125	(1.0625) 1.0625	2.0625
1950					(.4800) .3325	(.6750) .4375	.4375
Asian							
1990							
1970					.1406 (.0150)	.6250 (.0625)	.7656
1960					.1250 (.0001)	.6525 -(.2500)	.6875
1950					.1249 (.0799)	.8125 (.6250)	1.1862
					.0450E	.1875	.1875

E = estimate

*-Numbers in parenthesis indicate change in area between years.

Blacks which represented 4.6% of the 1970 county population, will continue to reside in Foster City, East Palo Alto and Redwood City, where projected expansion is focused for 1990. Of the five square miles projected for settlement in 1990 for the 26,794 to 27,334 Black persons, just over two square miles will have population densities that exceed 4,000 per square mile. These high density areas will be mainly located in the area of East Palo Alto, in which the county's greatest Black populations are presently located.

As is the case in other counties, the projected pattern for Asians will not experience great expansion. There were decreases in area from observed during the period 1960-1970, and by 1990 the pattern will not greatly change.

Transportation Needs Analysis

Demographic Profile of Respondents

Through two meetings in East Palo Alto and Redwood City, the respondents of the questionnaire for San Mateo County were 42% Spanish-heritage and 35% were Black. Unemployment among respondents was reported to be 41%. Fifty two percent of the respondents were female. Thirty seven percent of the respondents reported household sizes of five or more. Twenty five percent of the respondents reported their place of residence as being located in Redwood City, 15% reside in San Mateo and 27% reside in East Palo Alto. Residence locations for the remaining respondents are in Belmont, Burlingame, Menlo Park, Millbrae, San Bruno, Daly City, Portola Valley, Pacifica and Half Moon Bay. Thirty five percent of the respondents reported having less than a high school education. The median age for males is 41 and for females, 37. Fifty five percent of the respondents reported family incomes of less than $7,000 annually. Seventeen percent reported difficulty with walking, 8% reported hearing impairments and 14% reported sight impairments.

Travel Mode

The automobile was reported as the travel mode most often utilized. With the exception of social service oriented travel, respondents chose this travel mode for 60% of all travel purposes. Public transit is utilized by 20% of the respondents for their journey to work, with slightly higher percentages reported for medical and social service oriented trips. For recreation and social visits, 16% and 19% respectively reported using public transit (Table 76.)

Destinations

Destinations for various trip purposes in San Mateo County were widely dispersed. The destinations reported range from a low of thirteen for social service trips to eighteen different locations reported for social visits. The majority of the respondents indicated work trip destinations located in East Palo Alto, Redwood City and San Mateo, with the remainder traveling to San Francisco and Santa Clara counties. The main loci for travel to obtain medical services are in Redwood City, San Mateo, East Palo Alto and Daly City, with some respondents reporting travel out of the county to San Francisco. Most of the travel related to grocery shopping was located within the county and relatively close to

Table 76

PRIMARY TRAVEL MODE CHOICE

SAN MATEO COUNTY	TRAVEL MODE (Numbers in percentages)								
TRAVEL PURPOSE	DRIVE CAR	CAR PASSENGER	REGULAR BUS	DEMAND RESPONSE BUS	RAILROAD	BART	WALK	BICYCLE MOTORCYCLE	OTHER
WORK	41	19	18	2	1	1	10	1	*
MEDICAL	39	26	18	4	*	11	9	1	*
GROCERIES	40	22	16				19	1	*
SOCIAL SERVICES	35	20	21	2			14	5	2
RECREATION	36	25	12	4	1	*	13	4	2
RELIGIOUS	37	26	11	*			19	2	*
VISITING	41	23	19				16	1	*

N = 154

* Less than one percent

the place of residence. Travel for recreation was reported by a number of respondents to be out of the county, while the patterns for social visits are the most widely dispersed of all types of travel (Table 77.)

Alternate Travel Mode

It appears that respondents, if able to exercise their choice of travel mode, would strongly focus upon public transit (regular buses and demand responsive buses). A fairly large number of respondents also reported the railroad commuter service serving the county as a secondary travel mode choice (Table 78.)

Reasons for Travel Mode Choice

The majority of the respondents cite convenience as their main reason for choice of travel mode for all trip purposes. This was most often tied to choice of automobile as opposed to public transit, as were other reasons cited, e.g., selection of the most time effective mode, and only mode available. Respondents who reported public transit as their travel mode choice, most often gave as a reason the fact that they have no car. In most instances responses dealing with cost and time factors were tied to use of the automobile rather than public transit (Table 79.)

Transit Needs

The need exists for transit services to facilitate travel to Chope Hospital, which is located in the northern part of San Mateo County. Due to lack of transit services, residents in other parts of the county find that it can take as much as three hours to complete their trip to Chope Hospital. Existing bus services must be expanded to early morning and late night services, to allow workers to commute between their homes and jobs in Foster City, Millbrae and Burlingame.

Lack of transportation and/or high fares (which is very often the dominant factor) often prevent low-income persons from obtaining medical and social services. One possible solution is the issuance of some type of transportation "ticket" to facilitate travel. These could be issued through social service or community based agencies.

Non-traditional modes of travel such as mini-buses and demand response buses should be investigated as a possible solution to transit service needs. Residents in East Palo Alto could utilize this type of service to facilitate travel along the Bayshore to shopping centers.

Bi-lingual services and transportation personnel were cited as a need. Non-English speaking persons often hesitate to ride buses because of lack of bi-lingual information. Suggestions for possible solutions to this problem includes: schedules listing destinations and respective fares in Spanish to be posted inside the buses; some kind of color-coded signs at bus stops to enable non-English speaking persons to understand routes and destinations; and more bi-lingual drivers and information personnel.

The need exists for improved feeder service, reduced fares and/or no fare, and the upgrading of para-transit for utilization of the Southern Pacific Transportation Company (SP). One other area of need is the environmental up-lifting or beautification of SP right of way areas through blighted minority neighborhoods.

Table 77

TRAVEL DESTINATION

SAN MATEO COUNTY	TRAVEL PURPOSE						
	WORK	MEDICAL	GROCERIES	SOCIAL SERVICES	RECREATION	RELIGION	VISITING
CITIES:							
Belmont		1				2	
Burlingame	5	1	2			1	2
Coast Side					1		
Daly City		14	2	2	2	2	1
East Palo Alto	17	16	15	14	13	10	13
Fresno							1
Los Altos							1
Martinez							1
Menlo Park	2	3	1	3	1	6	3
Millbrae	1	3	2	1			1
Mountain View	5		8	4	5	1	4
North Fair Oaks							
Pacifica	1	1	2			1	2
Palo Alto	3	4	14	2	6	3	8
Portola Valley						1	
Redwood City	28	34	29	19	9	15	9
San Bruno	10	1	6	4		7	2
San Carlos	1				1		
San Francisco	10	11	7	8	11	11	13
San Jose	13	1		1	3	1	9
San Mateo	10	14	16	22	3	5	7
Santa Clara	1						
Santa Cruz					1		
South San Francisco	3	4	4				
Woodside				1		3	1
County-Wide			2	1	11	1	3
Bay Area					7		2
Outside of Region	2	3	1		20		7

Table 78

ALTERNATE TRAVEL MODE CHOICE

SAN MATEO COUNTY	TRAVEL MODE (Numbers in percentages)								
TRAVEL PURPOSE	DRIVE CAR	CAR PASSENGER	REGULAR BUS	DEMAND RESPONSE BUS	RAILROAD	BART	WALK	BICYCLE MOTORCYCLE	OTHER
WORK	9	17	38	6	6	*	15	5	*
MEDICAL	10	18	44	6	2	*	12	3	1
GROCERIES	9	20	31	3	1	*	18	6	
SOCIAL SERVICES	8	17	27	5	7	3	8	3	*
RECREATION	8	17	27	5	7	3	8	3	*
RELIGIOUS	7	20	21	3			13	2	
VISITING	8	18	33	2	8	3	6	7	1

N = 159

* Less than one percent

Table 79

SAN MATEO COUNTY

REASONS FOR SELECTION OF TRAVEL MODE

	TRAVEL PURPOSE (Numbers in Percentages)						
	WORK	MEDICAL	GROCERIES	SOCIAL SERVICES	RECREATION	RELIGION	VISITING
Convenience	21	26	29	12	25	18	17
Least travel time	15	16	9	7	6	5	6
No car available	14	9	11	12	5	7	
Only available mode	9	9	10	8	6	6	6
Least costly	8	6	2	3	4	3	4
No bus service	3	5	3	3	4	2	4
Inadequate bus routes & stops	4	3	6	4	2	2	3
Do not drive	3	3	2	2	1	1	*
Personal preference	3	2	3		2	1	3
Car required in work	8						
No evening bus service			*	2	*	1	1
No weekend service						1	2
No room for groceries			3				
Bus is too expensive	*	*			*		*
Safety considerations		*			1		
No bus stops		1					
Physically handicapped	1	1					

N-158

*Less than one percent

Currently, MTC is implementing a study which will collect information to determine the extent to which the transit needs of transit dependents within the Peninsula Corridor (San Francisco, San Mateo and Santa Clara) are met by the services provided by the Southern Pacific Transportation Company. This study is part of the MTC Peninsula Transportation Alternatives Project (PENTAP)* which was mandated by Assembly Bill (AB) 1853. During past activities, transit dependent populations and the Minority Citizens Advisory Committee requested that additional data be collected. AB 1853 was amended so that a PENTAP transit dependent study be implemented which would include MTNAP as well as other sources of information for preparing a final report in 1979 to the State Legislature.

Suggestions to Meet Transit Needs

For all trip purposes represented, respondents most often requested new or improved existing transit services. Respondents also suggested that more demand response services be added, particularly to facilitate medical and grocery shopping trips (Table 80.)

Conclusions and Recommendations - San Mateo County

San Mateo County residents raised the greatest number of concerns regarding transit-related needs and issues. Inequities appear to exist in the level of services to different parts of the county. The following are recommendations for solutions to stated transit concerns and issues.

Issue

o No transit service

Recommendations

- Expand bus services to outer-county areas.
- Improve the highway system.
- Provide feeder bus systems.
- Extend BART into San Mateo County.

Issue

o Inadequate transit service

Recommendations

- Improve bus scheduling to accommodate work trips.

* Information pertaining to the PENTAP Transit Dependent Study can be obtained at MTC.

Table 80

WAYS MTC CAN FACILITATE TRAVEL

SAN MATEO COUNTY	TRAVEL PURPOSE (Numbers in Percentages)						
	WORK	MEDICAL	GROCERIES	SOCIAL SERVICES	RECREATION	RELIGION	VISITING
Extend bus service	21	14	14	14	9	11	11
Provide better bus scheduling	25	18	10	11	11	6	12
Provide demand response buses	3	8	7	3	3	4	3
Lower fares	3	2	*	1	2	*	*
Extend BART county	5		1		2	1	*
Provide community vans		10		*			
Provide weekend service			1		2	5	3
Provide bus service to park and recreation areas					6		
Provide feeder buses	3	1		2	1		
Increase bus stops	1	1	1	*		1	1
Improve highways	1	*		1	*		1
Alleviate gas tax	*	*		*	*	*	*
Provide emergency bus service	*	*	*		*	*	
Improve bus safety				*			
Provide bus stop shelters	*						*
Provide more comfortable buses						*	*
Provide bilingual transit personnel	*						*

N - 159 *Less than one percent

- Provide mini-bus systems for transit-dependent poor.

- Provide a demand response system.

Issue

o Slow transit services

Recommendations

- Provide community-centered mini-bus systems.

- Provide a demand response system.

Issue

o Lack of transit service in off-peak periods

Recommendations

- Provide evening bus services to accommodate the late-evening and early-morning work commute.

- Provide better or new weekend bus service.

- Provide community van services to accommodate lack of regular transit service in off-peak hours.

- Provide off-peak period transit services on the Foster City, Millbrae and Burlingame routes to accommodate reverse commuters.

Issues

o Inadequate transit (bus) stops

Recommendations

- Increase bus stops along routes where demand exists.

- Provide bus stop shelters.

Issue

o No space for groceries

Recommendations

- Provide community van service geared to shoppers' needs.

- Improve bus interior design to accommodate parcels.

- Provide a demand response system geared to shoppers' needs.

Issue

o High fares

Recommendations

- Reduce transit fares.
- Provide free transit for poor transit-dependent population.

Issue

o Inconvenient transit service

Recommendations

- Provide bus stop shelters.
- Provide bi-lingual transit personnel to expedite service for non-English speaking users.

Issue

o Inadequate transit safety

Recommendations

- Provide lighting at bus stops.
- Increase security surveillance.
- Provide security personnel on buses.

Issue

o Lack of bi-lingual personnel

Recommendations

- Provide bi-lingual transit operators and information personnel.
- Provide bi-lingual transit information (signs and schedules).

Issue

o Uncomfortable transit vehicles

Recommendations

- Provide more comfortable buses/seating.

Issue

o Inadequate transit service to shopping facilities

Recommendations

- Provide community van services geared to shoppers' needs.

- Provide demand response systems geared to shoppers' needs.

Issue

o Inadequate transit service to medical facilities

Recommendation

- Provide an improved transit system (perhaps an express bus system) from the northern part of San Mateo County to Chope Hospital.

Issue

o Discourteous transit personnel

Recommendation

- Train drivers to be more sensitive to transit user needs.

X. SANTA CLARA COUNTY

County Description and Overview

Santa Clara County takes its name from the Mission dedicated to St. Clare of Assisi and is one of the original 27 counties of California. The area had many Indian settlements, and Spanish explorers of the 1760's and 1770's reported so favorably upon this rich agricultural land that San Jose was selected as the site for a pueblo which was to supply food for the garrisons at San Francisco and Monterey. Santa Clara is referred to as the "garden of the world" The University of Santa Clara, established in 1851, is one of the state's oldest collegiate institutions. San Jose State University is the oldest in the state.

Encompassing 1300 square miles, Santa Clara County lies at the south end of San Francisco Bay, between the Santa Cruz Mountains and the Diablo Range. Its dominant feature is the broad, level Santa Clara Valley, a productive agricultural area. Santa Clara was incorporated in February of 1850 and its county seat is San Jose. It is an important industrial county, with the most important industry being electrical machinery. The climate also makes Santa Clara County ideal for agriculture, with a growing season of about 9 months out of the year.

Regionally, Santa Clara County ranks second in terms of total county population (1,065,957) and third in terms of total minority population (244,020). The combined Spanish-heritage, Black and Asian population for the county is 235,667 or 22.1% of the total county population. The largest minority population group is that of Spanish heritage (186,525). The Black population is 18,128 and the combined Asian population is 31,014 (Table 81.)

Table 82 shows the numbers of minorities employed in various industries in Santa Clara County. Industries are ranked in order of the greatest number of minorities employed.

Contemporary Residential Patterns

- o Spanish heritage

The Spanish-heritage population for Santa Clara County is the largest in the region. It comprises 76.4% of the total minority population for the county and 31.6% of the total Spanish-heritage population for the nine-county region. Eight predominantly Spanish-heritage clusters are located within the county. Four of these (Sunnyvale, the City of Santa Clara, East San Jose and the Berryessa District) are dense urban concentrations. Alviso, Edonvale-South San Jose, Morgan Hill and Gilroy are less dense areas with substantially smaller population clusters.

- o Black

The Black population for Santa Clara County is 18,128, ranking it fifth regionally. The Black population comprises 7.4% of the total minority population for the county and 5.0% of the total Black population for the nine-county region. The majority are clustered in the vicinity of Berryessa in Southeast San Jose.

Table 81

SANTA CLARA COUNTY POPULATION 1970

	POPULATION GROUP					
	SPANISH HERITAGE	BLACK	CHINESE	JAPANESE	FILIPINO	OTHER*
Total Minority Population by Group	186,525	18,128	8,019	16,227	6,768	8,353
Percent of Total Minority Group by County as Compared to Regional Total by Minority Group	31.6	5.0	8.3	31.2	12.5	19.1
Percent of Total County Population	17.5	1.7	.8	1.5	.6	.8
Percent of Total Minority Population for County	76.4	7.4	3.3	6.7	2.8	3.4
Percent of Total Nine-County Population	4.0	.4	.2	.4	.2	.2
Percent of Total Nine-County Minority Population	15.5	1.5	.7	1.4	.6	.7

*Other includes Native American, Hawaiian and all other minorities not specifically mentioned in this report.

**Less than one-tenth of a percent.

Table 82

SANTA CLARA COUNTY MINORITY EMPLOYMENT

Industry	Number Employed	Percent
Service (includes business and repair services; private households and other personal services; entertainment and recreation; medical services; nongovernment education; welfare, religious and nonprofit sectors and legal and engineering professions)	16,545	20.5
Wholesale and Retail Trades (includes food, bakery and dairy stores; eating and drinking establishments and general merchandise stores)	13,931	17.2
Manufacturing (both durable and nondurable goods)	28,059	34.7
Public Administration (includes transportation; communication and utilities)	7,060	8.7
Finance, Insurance and Real Estate (includes banking and other credit agencies)	2,306	2.8
Construction	5,362	6.6
Agriculture, Forest and Fisheries	3,667	4.5
Mining	73	0.1
Total All Industries	80,944	100.0

Source: U.S. Department of Labor, 1970 Census.

o Chinese

The Chinese population for Santa Clara County is 8,019, ranking it third on a regional basis. Chinese comprise 3.3% of the total minority population for Santa Clara County, and 8.3% of the total Chinese population for the nine-county region. The single Chinese population cluster for the county is located in Chinatown in East San Jose.

o Japanese

The Japanese population for Santa Clara County is 16,227 and is the largest for the region. Japanese comprise 6.7% of the total minority population for the county and 31.2% of the total Japanese population for the nine-county region. The Japanese population clusters for Santa Clara are Mountain View and Japantown (San Jose).

o Filipino

The Filipino population for the County is 6,768, ranking it third for the region. The Filipino population comprises 2.8% of the total minority population for the county and 12.5% of the total Filipino population for the nine-county region. The two identified Filipino population clusters for Santa Clara County are located in Sunnyvale and South San Jose.

Population Growth and Spatial Trends (1990)

In 1970 the Spanish heritage population in Santa Clara County accounted for 17.5% of the county's population. Black and Asian populations each accounted for about 2% of the county's total population. The county population is expected to grow to 1.3 million by 1990. The Spanish heritage population in the county at that time is expected to be 244,223, while the Black and Asian populations will have grown to 22,119 and 28,585 respectively (Table 83.)

Table 83

Santa Clara County

Minority Population Profile 1950 to 1990

Year		Minority: Spanish Heritage	Black	Asian*	Total
1950		4,959	1,718	6,671	290,547
1960		109,588	4,187	12,826	642,315
1970		186,525	18,128	24,246	1,065,957
1990	Case 1	244,223	22,119	29,585	1,300,600
	Case 2	244,223	22,119	29,585	1,300,600

* Projections for Asian category consists only of Chinese & Japanese population.

By 1990, the Spanish heritage population of 319,747 will be the largest among the nine counties in the region and will cover a settlement area of nearly 42 square miles, an

increase of 4 square miles from 1970. Of this area, about 27 square miles will have population densities ranging between 2,000 and 4,000 persons per square mile. The area of 15 square miles is expected to have population densities exceeding 4,000 persons per square mile. The major area of high-density Spanish heritage settlement will remain in the San Jose clusters (East San Jose, Berryessa, Edenvale-South San Jose), with additional growth in the rural area of the county centered in Gilroy (Table 84.)

Berryessa, the county's only center of Black population, will expand to cover just over two square miles by 1990, almost doubling the 1.3 square miles of 1970. This accompanies a projected Black population increase from 18,128 in 1970 to 22,119 in 1990. Currently there is no evidence to suggest that the expansion of the Black settlement area will extend beyond that projected.

Current settlement trends of Asians indicate that no major Asian clusters will be formed in the county by 1990. Japantown in San Jose will probably survive as a symbolic center, but not as a major residential area. Again the Asian population is becoming assimilated to a degree that makes it increasingly difficult to find major clustering in the county.

Transportation Needs Analysis

Demographic Profile of Respondents

Through further outreach assistance by community agencies and the two county meetings in San Jose, the overall respondents of the questionnaires were 36% Spanish, 18% Chinese and 27% Japanese. Fifty-four percent of the respondents reside in San Jose. The next largest group of respondents from Gilroy; other cities represented are San Martin, Milpitas and Mountain View. The unemployment rate of 13% among respondents is low when compared to other counties surveyed. The median age of the respondents is 32. Fifty-four percent of the respondents are female. Fifty percent of the respondents have completed some college, and a similar proportion of the respondents have yearly incomes between $10,000 and $50,000.

Travel Mode

The automobile is used for work trips by 45% of the Santa Clara County respondents, while 50% of the respondents report using public transit in the form of buses (regular and demand responsive). When trips for medical services are required, the respondents rely heavily on the automobile. In these cases, the automobile is used by 72% of those surveyed, while 19% use public transit. A similar pattern is shown in travel mode choice for grocery shopping trips: 68% of the respondents use automobiles and 14% use public transit. The heaviest automobile useage is for recreational trips, for which cars are used by 81% of the respondents. While the automobile dominates as the travel mode in trips for social services, a significant minority (32%) of respondents use public transit for these trips (Table 85.)

Destinations

Among respondents living in the northern part of the county, San Jose (the county's largest city) is the main destination for trips in all seven trip categories. For respondents living

Table 84

SQUARE MILES IN POPULATION DENSITY CATEGORIES

SAN FRANCISCO BAY REGION

SANTA CLARA COUNTY	Density Category 64,000	32,000	16,000	8,000	4,000	2,000	All Categories
Spanish heritage							
1990					15.1875	26.6875	41.8750
1970					(3.5629)	(4.0625)	
				3.3125	11.6250	22.6250	37.5625
1960					(11.274)	(19.312)	
					.2500	3.3125	3.5625
					(.1250)	(1.3175)	
					.1250E	2.000E	2.1250
Black							
1990						2.1250	2.1250
1970						(.8125)	
						(1.3125)	1.3125
1960						(1.1875)	
						.1250	.1250
1950						(.0625)	
						.0625E	
Asian							
1990						.0000	.0000
1970						-(.3750)	
						.3750	.3750
1960						-(.5625)	
						.9375	.9375
1950						-(.2625)	
						1.2000E	1.2000

E = Estimates

*-Numbers in parenthesis indicate change in area between years.

Table 85

PRIMARY TRAVEL MODE CHOICE

SANTA CLARA COUNTY	TRAVEL MODE (Numbers in percentages)								
TRAVEL PURPOSE	DRIVE CAR	CAR PASSENGER	REGULAR BUS	DEMAND RESPONSE BUS	RAILROAD	BART	WALK	BICYCLE MOTORCYCLE	OTHER
WORK	36	9	36	14			5	5	
MEDICAL	45	27	14	5		5	14		
GROCERIES	27	23	27	5		5	9	5	
SOCIAL SERVICES	36	45	9			5	5		
RECREATION	14	45	9			5		5	
RELIGIOUS	23	27	14			9	23	5	
VISITING									

N = 22

in southern Santa Clara County, Gilroy is the predominant destination for all trip purposes except social visits. As in some other counties, recreational trip destinations are most widely dispersed, with more numerous destinations and more destinations outside the region than among other trip categories. A similar pattern is present for social visits, although it is not as widely dispersed. (Table 86.)

Alternate Travel Modes

If travel mode alternatives were available, respondents would most often choose the automobile to make four types of trips: work, grocery shopping, social services and recreation. Public transit is most often the preferred alternative for medical trips and social visits with substantial proportions of the respondents regarding public transit as the preferred alternative for work trips (23%) and social visits (46%) (Table 87.)

Reasons for Travel Mode Choice

Inadequacy of public transit routes and stops is reported as the major reason for current choice of travel mode among Santa Clara County respondents. This is the predominant reason for travel mode choice in all categories except work, where the predominant reason is time efficiency. Time efficiency is also a significant factor in travel mode choice for other categories of travel. Dependability appears consistently as a reason for travel mode choice in all categories except medical trips. Convenience is frequently cited as the reason for recreational travel mode choice (Table 88.)

Transit Needs

To satisy the needs of the transit-dependent population residing in East San Jose and commuting to work in Mountain View and Palo Alto, there is need for more frequent and more time efficient public transit service.

One project currently under way, which is doing a socio-economic impact analysis associated with projected transportation alternatives being considered for Santa Clara County, is the Metropolitan Transportation Commission (MTC) Association of Bay Area Governments (ABAG) joint Santa Clara Valley Corridor Evaluation Project (SCVCE).*

Current findings from this socio-economic analysis do state that:

> Transit is available to the majority of the transit dependents. Presently virtually all of the county transit district's 27 regular weekday and nine midday bus routes operate in areas where the majority of the transit dependents are located. In addition, a Dial-a-Ride service is available in Morgan Hill, San Martin and Gilroy which delivers passengers to transfer points where they may connect with line 68 (Gilroy to San Jose). The district also has two routes served with four coaches which can accommodate wheelchairs and walkers. Reduced fares are in effect for elderly, handicapped and youths 17 years of age and younger. However, while the coverage for the majority of the transit dependents exists, frequency of service and difficulty of transfering from one bus line to another remain as major problems for most transit dependents.

* Information can be obtained from the ABAG/MTC Santa Clara Valley Corridor Evaluation (SCVCE) final Socio-Economic Impact Analysis and background data.

Table 86

TRAVEL DESTINATION

SANTA CLARA COUNTY	TRAVEL PURPOSE						
	WORK	MEDICAL	GROCERIES	SOCIAL SERVICES	RECREATION	RELIGION	VISITING
CITIES:							
Berkeley					1		
Cupertino	1						
Gilroy	5	4	4	4	2	2	1
Hollister					2	3	
Los Gatos		1					
Milpitas			2	2	2	2	1
Mountain View	1	1	1				
Oakland					1		2
Palo Alto		1					
San Jose	12	11	14	8	5	7	6
San Leandro	1						
San Francisco	1				3		2
San Martinez							2
Santa Clara		2		1	1		
Santa Cruz							1
BayArea Wide					1		1
County Wide							2
Outside Region					2		1

Table 87

ALTERNATE TRAVEL MODE CHOICE

SANTA CLARA COUNTY	TRAVEL MODE (Numbers in percentages)								
TRAVEL PURPOSE	DRIVE CAR	CAR PASSENGER	REGULAR BUS	DEMAND RESPONSE BUS	RAILROAD	BART	WALK	BICYCLE MOTORCYCLE	OTHER
WORK	5	23	18	5			18	18	
MEDICAL		23	23	14			18	18	
GROCERIES	14	18	14	9			14	5	
SOCIAL SERVICES	9	23	14	14			14	5	
RECREATION	23	23	18		14	14	5	5	
RELIGIOUS									
VISITING		32	32	14	9	5	5	5	

N = 22

Table 88

SANTA CLARA COUNTY

REASONS FOR SELECTION OF TRAVEL MODE/

	TRAVEL PURPOSE (Numbers in percentages)						
	WORK	MEDICAL	GROCERIES	SOCIAL SERVICES	RECREATION	RELIGION	VISITING
Inadequate bus routes and stops	5	23	9	23	23	23	27
Least travel time	27	23	14	14	14	14	9
Most dependable mode	14		9	9	14	9	9
Convenience	9				23	9	14
Only available mode	14		5	14	9		9
No car available	14		5	14	5		
Personal preference	5		9		5	5	14
Least costly	9			5		9	
Safety consideration	5				5	5	5
No weekend bus service	5				5	5	
Do not drive		5		9			
Car required in work	5						

N=22

Approximately seven percent of all households countywide did not have an automobile available. Lack of automobiles is most prevalent in central areas of the county's cities, as well as in southeast San Jose, southern Santa Clara, and northern Palo Alto. These areas are the same areas with low income households, a predominance of Hispanics, elderly, over-crowded housing conditions, and where the unemployed are most heavily concentrated.

Presently, about 60% of the total residents of Santa Clara County live within one quarter mile of a bus route. The Santa Clara County Transit District operates 27 regular weekday bus routes, 24 of which operate on 30 minute headways between the hours of 6:00 a.m. and 6:00 p.m. The transit district also offers nine midday routes from 9:00 a.m. to 3:00 p.m. with 30 minute headways and limited bus service on eleven lines between 6:00 p.m. and 10:00 p.m. with headways varying form 30 to 60 minutes. On weekends, the transit district operates 24 lines on Saturday and 20 lines on Sunday with headways ranging from 30 to 180 minutes, with about half of the lines on both days operating with 60 minute headways.

In addition, Dial-a-Ride service is available in Morgan Hill, San Martin, and Gilroy, which delivers passengers to their door within this area or will deliver passengers to transfer points where they may connect with line 68 (i.e., Gilroy to San Jose). Also, the transit district has two bus routes served with four coaches which can accommodate wheelchairs and walkers. Reduced fares are also in effect for handicapped persons.

The bus routes for the most part do provide adequate coverage for the majority of the transit dependents in north and central county, although frequency and reliability of service remain major problems in the district's operation in these areas. South county area coverage, however, is limited due to line 68 which is the only route operated on a 60 minute headway during midday and Dial-a-Ride service.

While there are many routes which provide service to the major employment centers of the county, accessibility is not sufficient because of the number of jobs which are concentrated in specific areas of the county and the dispersal pattern of residential settlement. This is true for most of the higher income areas of the couty, bus especially for the residents of south county, particularly Gilroy.

Accessibility to shop by bus transit appears to be adequate as long as the shopper is willing to restrict his/her activities to certain areas of the county, thereby avoiding time consuming transfers. In addition, accessibility to shop in Santa Clara County is aided by the existence of over 150 shopping areas ranging in size from neighborhood centers (e.g., Bailey Park Plaza/Mountain View, Hecker Pass Center/Gilroy) to super regional centers (e.g., Valleo Park/Cupertino, Eastridge/Alum Rock) which are capable of providing many shopping needs.

Social services (e.g., hospitals, welfare offices, etc.) in the county are generally located in the most populated areas of the county. In areas where

there is a relative lack of social services such as Alum Rock, southeast San Jose, Evergreen, Almade, Berryessa, Milpitas, Coyote, and San Martin, bus transit is available, but the frequency of service and its reliability are generally lacking and undependable. Also accessibility to social services by bus is lacking to the more sparsely populated areas of the county, and in some areas, is totally non-existent.

For the most part, transit accessibility are available on weekends to the major regional parks of the county is very limited. The regional parks which are serviced by bus transit on weekends are Mountain View's Shoreline Park, Alviso Marina County Park, Coyote Creek Park Chain (not fully developed), Stevens Creek Park Chain (not fully developed), Vasona Lake County Park, and Los Alamitos-Calero Park Chain (not fully developed).

The transit district also provides inter-county and regional transit connections with BART in Fremont, Southern Pacific Railroad Depots, Menlo Park Carriage Authority, AMTRAK passenger rail service, Greyhound, and Peerless Stages. Generally, connections to all of these transit services, except for Southern Pacific, are relatively sparse.

There is a clear need for new or improved existing bus routes for minority neighborhoods in Gilroy, Morgan Hill, Hollister and South County as indicated by petitions consisting of hundreds of signatures which were submitted at the MTNAP meeting held in San Jose and sponsored by La Confederacion De La Raza Unida Del Condado de Santa Clara. These petitions were circulated by people in their neighborhoods and fully explained in detail the proposed route improvements.

Suggestions to Meet Transit Needs

Santa Clara County respondents consistently call for better bus service in offering suggestions for the facilitation of travel by MTC. Specific suggestions are mainly for extended bus routes, weekend and evening service, and improved bus safety and comfort. (Table 89.)

Conclusions and Recommendations - Santa Clara County

The following are concerns and issues expressed by the respondents of Santa Clara regarding transit services, accompanied by recommendations for solutions to those stated needs.

Issue

o Inadequate transit service

Recommendations

- Expand and improve the present system.
- Organize car pools.
- Improve the highway system.

Table 89

WAYS MTC CAN FACILITATE TRAVEL

SANTA CLARA	TRAVEL PURPOSE (Numbers in Percentages)						
	WORK	MEDICAL	GROCERIES	SOCIAL SERVICES	RECREATION	RELIGION	VISITING
Provide better bus service	36	321	9	14	32	27	36
Extend bus routes	23	18		27	18	14	18
Provide weekend service		5			18	14	18
Provide emergency bus service	5	9			9	9	9
Improve bus safety		5	9	9	5	5	5
Provide more comfortable buses	5	5	14		5	5	5
Provide community vans		18					
Establish lower fares			18				
Provide demand response buses		5		5	5		
Improve highway	5		14				
Organize car pools			18				
Provide education programs on bus		5		5			
Provide bus service to parks and recreation					5		
Alleviate gas tax			5				
Provide more buses	5						
Establish bike lanes						5	
Improve BART service	5			5	5		

N = 22

Issue

o Slow transit service

Recommendations

- Improve existing bus schedules.
- Add more buses per routes.
- Improve time efficiency on routes between East San Jose and the Mountain View-Palo Alto area.

Issue

o Lack of transit service in off-peak periods.

Recommendations

- Provide weekend bus service.
- Provide evening bus service.
- Provide community van services to accommodate lack of transit service in off-peak periods.

Issue

o High fares

Recommendation

- Establish lower fares.

Issue

o Inconvenient transit service

Recommendations

- Provide educational programs (classes) on commuter buses.
- Provide a demand response system.

Issue

o Inadequate transit safety

Recommendation

- Provide better lighting at bus stops.

Issue

o Uncomfortable transit vehicles

Recommendation

- Improve bus design to increase comfort.

XI. SOLANO COUNTY

County Description and Overview

Solano County is one of the original 27 counties of the state. The Indian chief who ruled over most of the tribes between Petaluma Creek and the Sacramento River accepted the Christian faith and took the name of "Solano" after the Franciscan missionary, Francisco Solano. The Mexican "commandante," General Mariano Guadalupe Vallejo asked that the county be named for Chief Solano, and his request was granted. Two cities in the county were state capitals for short periods; in 1851, the State Capital was moved to Vallejo and in 1753, to Benicia. The Benicia Arsenal, now inactive, and Mare Island Naval Shipyards are among the oldest military establishments in the state. Solano was incorporated in February of 1850. The county seat is Fairfield.

Encompassing 825 square miles, Solano County extends north and west from the lower Sacramento River and Suisun Bay to the Southeastern end of the North Coast Ranges. The southern and eastern two-thirds of the county are the level Sacramento River flood plain and the marshes adjoining Suisun and San Pablo bays.

Food processing is the dominant industry in Solano County. A number of firms in the area process and package meat, fruit, vegetables and grain mill products. Printing and publishing is the second most important industry. Field crops are Solano County's most important agricultural commodities.

Regionally, Solano County ranks eights in terms of total county population (166,201) and sixth in terms of total minority population (42,100). The combined Spanish-heritage, Black and Asian population for the county is 39,947 or 24.0% of the total county population. The largest minority population group is that of Spanish heritage (18,399). The Black population is 16,520 and the combined Asian population is 5,028 (Table 90.)

Table 91 shows the numbers of minorities employed in various industries in Solano County. Industries are ranked in order of the greatest number of minorities employed.

Contemporary Residential Patterns

- o Spanish heritage

The Spanish-heritage population for Solano County (18,399) ranks it sixth regionally. It comprises 43.7% of the total minority population for the county and 3.1% of the total Spanish heritage population for the region. There are 12 identified Spanish-heritage population clusters for the county. They are Benicia, East and Central Vallejo, West Vallejo, North Vallejo-Country Club Crest, Rockville-I80, Fairfield-Suisun City, Travis Air Force Base, Vacaville, Allendale-Route 505, two clusters at Dixon I80 and Rio Vista.

- o Black

The Black population for Solano County (16,520) ranks it sixth regionally. Blacks comprise 39.2% of the total minority population for the county and 4.5% of the total Black population for the region. There are six black population clusters identified in

Table 90

SOLANO COUNTY POPULATION 1870

	POPULATION GROUP					
	SPANISH HERITAGE	BLACK	CHINESE	JAPANESE	FILIPINO	OTHER*
Total Minority Population by Group	18,399	16,520	813	1,054	3,161	2,153
Percent of Total Minority Group by County as Compared to Regional Total by Minority Group	3.1	4.5	.8	2.0	5.8	4.9
Percent of Total County Population	11.1	9.9	.5	.6	2.0	1.3
Percent of Total Minority Population for County	43.7	39.2	1.9	2.5	7.5	5.1
Percent of Total Nine-County Population	.4	.4	**	**	.1	**
Percent of Total Nine-County Minority Population	1.5	1.4	.1	.1	.3	.2

*Other includes Native American, Hawaiian and all other minorities not specifically mentioned in this report.

**Less than one-tenth of a percent.

Table 91

SOLANO COUNTY MINORITY EMPLOYMENT

Industry	Number Employed	Percent
Service (includes business and repair services; private households and other personal services; entertainment and recreation; medical services; nongovernment education; welfare, religious and nonprofit sectors and legal and engineering professions)	2,657	23.7
Wholesale and Retail Trades (includes food, bakery and dairy stores; eating and drinking establishments and general merchandise stores)	2,046	18.2
Manufacturing (both durable and nondurable goods)	25,30	22.5
Public Administration (includes transportation; communication and utilities)	547	4.9
Finance, Insurance and Real Estate (includes banking and other credit agencies)	298	2.7
Construction	425	3.8
Agriculture, Forest and Fisheries	498	4.4
Mining	15	0.1
Total All Industries	11,223	100.0

Source: U.S. Department of Labor, 1970 Census.

Solano County, four of which are located in Vallejo (West, Central and Southeast Vallejo and the Country Club Crest-Parkview Terrace-Sears Point Road areas.) Suisun City-Fairfield and Travis Air Force Base are the other concentrations which are east of Vallejo on Interstate 80.

o Chinese

The Chinese population for Solano County (813) ranks it seventh regionally. Chinese comprise 1.9% of the total minority population for the county and 8% of the total Chinese population for the region. There is one identified population cluster, and that is North Fairfield.

o Japanese

The Japanese population for Solano County (1,054) ranks it seventh regionally. Japanese comprise 2.5% of the total minority population for the county and 2.0% of the Japanese population for the entire region. There is one small population cluster identified for Solano, centered in Northeast Fairfield, where approximately 1,000 of the county's Japanese population live.

o Filipino

The Filipino population for Solano County (3,161) ranks it fifth regionally. Filipinos comprise 7.5% of the total minority population for the county and 5.8% of the total Filipino population for the region. There are two small identified population clusters, located in North Vallejo and Fairfield-Suisun.

Population Growth and Spatial Trends (1990)

Solano's total population is forecasted to increase at annual rates between 1.3% and 4.2% up to 1990, reaching a total population ranging between 215,178 and 377,402.

By 1990 the Spanish heritage and Asian populations will respectively account for 16.0% and 1.1% of the total population. Black populations will reach 9.9% of the total population (Table 92.)

Table 92

Solano County

Minority Population Profile 1950 to 1990

Year		Minority: Spanish Heritage	Black	Asian*	Total
1950		798	6,604	837	104,833
1960		9,686	12,741	1,596	134,597
1970		18,399	16,520	1,867	166,201
1990	Case 1	52,288	37,513	4,239	377,402
	Case 2	26,258	21,388	2,417	215,178

* Projections for Asian category consists only of Chinese & Japanese population.

Due to the lack of sufficient data, it is not possbile to project the settlement patterns for the Spanish heritage and Asian populations for 1990. The Spanish-heritage settlement in 1970 and the years prior has been large. Fourteen clusters were identified in 1970 from Vallejo along I80 to Dixon. All of these clusters are quite small and their population densities generally do not exceed 2000 people per square mile. Another contributing factor is the lack of sufficient data with which to historically plot the settlement pattern. Therefore, it is not possible to accurately project future Spanish-heritage settlement patterns, although the population is forecasted to be between 26,258 and 52,288 by 1990. It does appear that the 1990 settlement pattern for the Spanish-heritage population will follow that outlined in 1970.

For similar reasons, compounded by the fact that the Asian population in Solano County is quite small, it is not possible to project the future Asian settlement patterns. Again, it is reasonable to assume that Asian settlements will continue to be more dispersed than in the past, as is the pattern for all counties.

Black settlement areas in 1990 will be found in Vallejo and Suisun City-Fairfield. The Black population in Solano County will show an increase of two square miles over the 1970 area. Most of this will be low density, with the exception of a .6 square mile area located in Vallejo, where densities will exceed 4000 people per square mile (Table 93.)

Transportation Needs Analysis

Demographic Profile of Respondents

The largest number of respondents in Solano County reside in Vallejo (30%), followed by Fairfield and Vacaville (15% each). Other cities reported as place of residence were Suisun and Rio Vista. Through two meetings held in Vacaville and Vallejo, thirty one percent of the overall respondents were of Spanish-heritage and 32% were Black. The male median age for respondents was 45 and for females it was 48 years of age. Reported household size was small, with 52% reporting three or less members in their household. Unemployment was reported at 28% and 53% of the sample reported median family incomes of less than $7,000. Almost half of the respondents have less than a high school education. Fifteen percent reported difficulty seeing, 6% reported hearing impairments and 21% reported difficulties with walking.

Travel Mode

The automobile was reported as the dominant travel mode choice in Solano County. The percentages reported were 64% for the journey to work; 88% for travel to medical services and grocery shopping; and slightly above 80% for travel related to social services, recreation, attendance at religious services and social visits. The use of public transit is less than 10% for all trip categories considered (Table 94.)

Destinations

Work trip destinations are more concentrated than in other counties in the region. Fairfield is the central location for employment location, followed by Vallejo, Dixon and Vacaville. Travel related to shopping is located relatively close to place of residence, as is travel to attend religious services. Social visits are the most widely dispersed travel pattern for the county (Table 95.)

Table 93

SQUARE MILES IN POPULATION DENSITY CATEGORIES

SAN FRANCISCO BAY REGION

SOLANO COUNTY	Density Category 64,000	32,000	16,000	8,000	4,000	2,000	All Categories
Spanish heritage							
1990							
1970					.2500	3.5625	3.8125
Black							
1990					.6250	4.0625	4.6875
1970					(.3125)	(1.3750)	
				.0625	.3125	2.0625	2.4375
1960					(.1875)	(1.125)	
					.1250	.9375	1.0625
1950					(.0625)	(.5625)	
					.0625E	.3750	.3750
Asian							
1990							
1970						.1875	.1875
1960							
1950							

E = Estimate

*-Numbers in parenthesis indicate change in area between years.

Table 94

PRIMARY TRAVEL MODE CHOICE

SOLANO COUNTY	TRAVEL MODE (Numbers in percentages)								
TRAVEL PURPOSE	DRIVE CAR	CAR PASSENGER	REGULAR BUS	DEMAND RESPONSE BUS	RAILROAD	BART	WALK	BICYCLE MOTORCYCLE	OTHER
WORK	57	17	4				13		2
MEDICAL	62	26	6	2			2	2	
GROCERIES	60	28	2	2			4	2	2
SOCIAL SERVICES	55	28	6	2			6	2	
RECREATION	51	36	2	2			4	2	2
RELIGIOUS	62	21					11	2	2
VISITING	62	30	2				4	2	

N = 47

Table 95

TRAVEL DESTINATION

SOLANO COUNTY	TRAVEL PURPOSE						
	WORK	MEDICAL	GROCERIES	SOCIAL SERVICES	RECREATION	RELIGION	VISITING
CITIES:							
Benicia							
Berkeley	1						1
Berryessa						1	
Clarksburg					4		
Concord							1
Davis		2	1	1			1
Dixon	7	4	6	2	1	5	4
Fairfield	11	8	7	3	2	5	5
Maryland		1					
Oakland							4
Richmond			1	1		2	2
Rio Vista	1	1	2	2	2		2
Sacramento		3	3	1	4		2
San Francisco					3		3
Suisun	1		2	5	2	5	2
Stockton							1
Travis		2	2				
Tulare		1	1	1	1	1	
Vallejo	7	12	16	11	4	11	5
Vacaville	5	10	4	6	7	5	7
Winters	1						
Woodland			2			1	
Bay Area - 11					2		
Outside of Region - 10					1		2

Alternate Travel Mode

When comparing the travel mode choices (Table 94) with the alternate travel mode choices (Table 96) a shift towards use of public transit is indicated. For the work trip, 15% of the respondents indicated the bus as an alternate mode choice. The preference for public transit as an alternate travel mode choice appears in all travel categories, with travel to obtain medical services receiving the highest number of responses (34%).

Reasons for Travel Mode Choice

In all trip categories, respondents indicated selection of the automobile as a travel mode was determined by the absence of transit services. Convenience was given as another reason; however, this also tied in to the lack of transit services in most instances (Table 97.)

Transit Needs

Solano County has a number of unmet needs with regard to transit services. There is a need for better internal transit in the city of Vallejo, and an arrangement needs to be made that does not require those who work at Mare Island to change buses at the base gates. For those who commute to jobs in San Francisco, the present transit system is inadequate.

Presently, demand response services are available to the needy through EOC offices, for travel to obtain social and medical services. This is an experimental program, which needs to be evaluated and, if found to be succesful, fully implemented.

At a recent MTC public hearing regarding transportation development act (TDA) funds held in Solano County on May 4, 1978,* these and other transportation needs were expressed. It was pointed out by representatives of low-income, handicapped and minority persons that there are gaps in available transit services, including the absence of weekend and emergency transportation, intra-county transportation and transportation for those who cannot use conventional taxis or buses without special equipment such as wheelchair lifts. According to a May 5th article in the Times Herald, Fairfield's Dial-a-Ride Transit (DART) bus system is inadequate and unreliable. Some urge improvements to it, while others ask that the city reinstate a taxi subsidy program which DART supplanted. Another representative stated at the meeting that American Canyon Residents - particularly older ones - have difficulty in obtaining transportation to Napa or Vallejo. Transportation between the cities of Vallejo and Napa is also inadequate.

Suggestions to Meet Transit Needs

The majority of the respondents suggested the MTC provide regular bus services throughout the county, with the secondary suggestion being the improvement of existing bus services. In the realm of medical and grocery shopping trips, MTC is urged to provide an improved demand response system, with reasonable fares (Table 98.)

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* For information on TDA funds please see MTNAP Napa County section, "Transit Needs" page

Table 96

ALTERNATE TRAVEL MODE CHOICE

SOLANO COUNTY	TRAVEL MODE (Numbers in percentages)								
TRAVEL PURPOSE	DRIVE CAR	CAR PASSENGER	REGULAR BUS	DEMAND RESPONSE BUS	RAILROAD	BART	WALK	BICYCLE MOTORCYCLE	OTHER
WORK	19	30	15				23	6	2
MEDICAL	21	26	23	11			12	2	2
GROCERIES	30	26	15	2		2	12	2	2
SOCIAL SERVICES	21	26	17	9		4	17	2	4
RECREATION	21	21	15	9	2	2	11	2	2
RELIGIOUS	28	30	9			2	11	2	2
VISITING	26	21	21	6	4	6	4	4	

N = 47

Table 97

SOLANO COUNTY

REASONS FOR SELECTION OF TRAVEL MODE

	TRAVEL PURPOSE (Numbers in percentages)						
	WORK	MEDICAL	GROCERIES	SOCIAL SERVICES	RECREATION	RELIGION	VISITING
Only available mode	38	40	32	36	28	34	40
Convenience	17	23	32	21	32	26	26
No public transportation	9	9	11	2	9	9	9
Public transportation unreliable	6	11	4	4	4	2	2
No car available	4	4	4	2		2	
Do not drive		4	2				
Car required in work	6						

N=47

Table 98

WAYS MTC CAN FACILITATE TRAVEL

SOLANO COUNTY	TRAVEL PURPOSE (Numbers in Percentages)						
	WORK	MEDICAL	GROCERIES	SOCIAL SERVICES	RECREATION	RELIGION	VISITING
Provide regular bus service	34	45	43	28	34	28	23
Improve existing bus service	21	17	23	19	21	9	15
Extend BART sevrice to county	9	6	2			6	
Improve demand response bus service		9	9	6		2	
Provide cheaper transportation		6	6		4	2	2
Provide free jitney service to bus and railroad terminal	9	2					
Provide bus service after 6:00 PM			2				6
Provide community vans		2	4	2			
Provide Sunday bus service on regular schedule	2					4	2
Provide better schedules and information		4					
Improve limited Sunday bus service	2					2	2
Allow Vallejo buses to enter Mare Island	2						

Conclusions and Recommendations - Solano County

As with the other northern counties, Solano County has a large transit-dependent population. Transit services are more dispersed and not as frequent as the heavier populated counties, causing particular transit-related concerns and needs. The following are concerns and transit related issues for Solano County, accompanied by recommendations for solutions.

Issue

o No transit service

Recommendations

- Extend BART service to Solano County.
- Provide more commuter buses between Vallejo and San Francisco.
- Provide local transit services in the Vacaville - Dixon areas.
- Improve intra-county transit network.

Issue

o Unreliable transit service

Recommendations

- Provide improved existing bus services.
- Provide evening bus service.
- Provide better scheduling information.

Issue

o Inconvenient transit service

Recommendations

- Provide a demand response system.
- Provide community vans.
- Provide weekend services.

Issue

o Inadequate transfer points

Recommendations

- Provide free jitney service from residential areas to the railroad terminal.
- Allow Vallejo buses to enter Mare Island for individuals who have a work commute between those points.

XI. SONOMA COUNTY

County Description and Overview

Sonoma County has retained the Indian name "Tso-noma" translated by Jack London as "Valley of the Moon." It is one of the state's original 27 counties. What is now Bodega Bay was discovered in 1775 by the Spanish explorer Juan Francisco de la Bodega. Fort Ross (Rossiya-Russia) represents the Russian attempt of 1812 to settle in California and use it as a supply base for Russia's Alaskan fur trade. It was maintained until 1841 and is now a historical landmark. In 1975, Colonel Haraszthy used Chinese labor to dig a tunnel into a hillside on his Buena Vista vineyards for the storage of 5,000 gallons of wine. Colonel Haraszthy is known as the father of the California wine-making industry. Sonoma County was incorporated in February of 1850. The county seat is Santa Rosa.

Encompassing 1,603 square miles, Sonoma County extends from Marin County and San Pablo Bay north and west to include a long rugged Pacific coastline and a large part of the North Coast ranges. Most of the county is hilly; ridges trend northwest-southwest and are separated by narrow valleys. Farming is a major industry, particularly in the Santa Rosa, Sonoma and Russian River valleys, which are large areas of productive level land. Other leading industries are lumber and wood products, food processing operations, nonelectrical machinery, printing and publishing, fabricated metal products and stone, clay and glass products.

Regionally, Sonoma County ranks seventh for both total county population (204,849) and total minority popultion (21,208). The combined Spanish-heritage, Black and Asian population for the county is 18, 856 or 9.2% of the total county population. The largest minority group population is that of Spanish heritage (15,200). The Black population is 1,978 and the combined Asian population is 1,678 (Table 99.)

Table 100 shows the numbers of minorities employed in various industries in Sonoma County. Industries are ranked in order of the greatest number of minorities employed.

Contemporary Residential Patterns (1970)

- Spanish heritage

The Spanish-heritage population for Sonoma County is 15,200, ranking it seventh regionally. This minority group comprises 71.7% of the total minority population for the county and 2.6% of the total Spanish-heritage population for the nine-county region. The seven identified population clusters are located in the city of Sonoma, Petaluma, Rhonert Park-Cotati, Santa Rosa, Healdsburg, Geyserville and Cloverdale.

- Black

The Black population for Sonoma County (1,978) ranks it eighth regionally. Blacks comprise 9.3% of the total minority population for the county and .5% of the total Black population for the nine-county region. Sonoma County's two Black population clusters are located in Southeast Santa Rosa and Santa Rosa Air Force Base. Together these clusters account for nearly all of the county's 1,978 Blacks.

Table 99

SONOMA COUNTY POPULATION 1970

	POPULATION GROUP					
	SPANISH HERITAGE	BLACK	CHINESE	JAPANESE	FILIPINO	OTHER*
Total Minority Population by Group	15,200	1,978	373	879	426	2,357
Percent of Total Minority Group by County as Compared to Regional Total by Minority Group	2.6	.5	.4	1.7	.8	5.4
Percent of Total County Population	7.4	1.0	.2	.4	.2	1.2
Percent of Total Minority Population for County	71.7	9.3	1.8	4.1	2.0	11.1
Percent of Total Nine-County Population	.3	**	**	**	**	.1
Percent of Total Nine-County Minority Population	1.3	.2	**	.1	**	.2

*Other includes Native American, Hawaiian and all other minorities not specifically mentioned in this report.

**Less than one-tenth of a percent.

Table 100

SONOMA COUNTY MINORITY EMPLOYMENT

Industry	Number Employed	Percent
Service (includes business and repair services; private households and other personal services; entertainment and recreation; medical services; nongovernment education; welfare, religious and nonprofit sectors and legal and engineering professions)	1,428	23.3
Wholesale and Retail Trades (includes food, bakery and dairy stores; eating and drinking establishments and general merchandise stores)	1,188	19.4
Manufacturing (both durable and nondurable goods)	976	15.9
Public Administration (includes transportation; communication and utilities)	607	9.9
Finance, Insurance and Real Estate (includes banking and other credit agencies)	324	5.3
Construction	451	7.3
Agriculture, Forest and Fisheries	694	11.3
Mining	45	0.7
Total All Industries	6,138	100.0

Source: U.S. Department of Labor, 1970 Census.

o Chinese

The Chinese population for Sonoma County (373) ranks it eighth regionally. Chinese comprise 1.8% of the total minority population for the county and .4% of the total Chinese population for the nine-county region. There are no identified Chinese population clusters in Sonoma County.

o Japanese

The Japanese population for Sonoma County (879) ranks it eighth regionally. Japanese comprise 4.1% of the total minority population for the county and 1.7% of the total Japanese population for the nine-county region. There are no identified Japanese population clusters in Sonoma County.

o Filipino

The Filipino population for Sonoma County (426) ranks it eighth regionally in terms of population size. Filipinos in Sonoma comprise 2.0% of the total minority population for the county and .8% of the total Filipino population for the nine-county region. There are no identified Filipino population clusters in Sonoma County.

Population Growth and Spatial Trends (1990)

Sonoma County is a low-density area which has a total population between 241,928 and 337,311 forecasted for the year 1990. The largest minority group, that of Spanish heritage, is expected to include between 19,246 and 31,300 persons by 1990, while the Black and Asian groups together will account for 3,815 to 5,318 persons. (Table 101.)

Table 101

Sonoma County

Minority Population Profile 1950 to 1990

Year		Minority: Spanish Heritage	Black	Asian*	Total
1950		419	460	805	103,405
1960		1,898	918	1,065	147,375
1970		15,200	1,978	1,252	204,849
1990	Case 1	31,300	3,257	2,061	337,311
	Case 2	19,246	2,336	1,479	241,928

* Projections for Asian category consist only of Chinese & Japanese populations.

Because of the relatively small sizes and low densities of the minority populations and because of unavailable historical data, it is not possible to project future settlement patterns. The small increase in minority populations expected to occur by 1990 will generally follow the 1970 distributional pattern. It is the wisdom of local authorities that by 1990 the Spanish heritage settlement patterns will expand and develop along the "L"-shaped area formed by the segment of U.S. 100 between Windsor and Santa Rosa and along California Highway 12 between Santa Rosa and Sebastopol.

Transportation Needs Analysis

Demographic Profile of Respondents

Seventy-three percent of the questionnaire respondents from the three meetings in Sonoma County and further outreach assistance by community based agencies were of Spanish heritage, 10% were Chinese and 10% were Black. Fifty-four percent of the respondents were female and 46% were male; the median age of the female respondents is 38 and that of male respondents was 47. Fifty-one percent of the respondents reported household size of five persons or more. Thirty-two percent of the respondents reported yearly family incomes of less than $7,000, and the unemployment rate among respondents is 22%. Fifty-one percent reported having completed some college, while 49% had a high school education or less. Difficulty in seeing was reported by 24%, with hearing difficulties and walking difficulty reported by 10% and 7%, respectively.

Travel Mode

For all travel purposes except trips to social service agencies and recreational trips, 90% or more of the respondents use automobiles as their travel mode. Even in the latter categories, automobile use is heavy (among about 80% of the respondents) and use of public transit is light (Table 102.)

Destinations

Work trip destinations are concentrated in Santa Rosa, and centers of medical services, grocery shopping and religious services are Santa Rosa, Healdsburg and Windsor. Recreational trips are dispersed among eight destinations and social visits among thirteen destinations; these are the trip categories of most widely dispersed destinations. (Table 103.)

Alternate Travel Mode

The choice of bus travel as an alternate mode is preferred by 10% of 17% of the respondents for all trip purposes except social and religious services. Walking and riding bicycles and motorcycles were reported as preferred modes of travel among consistently few persons for all trip categories. (Table 104.)

Reasons for Travel Mode Choice

The most frequently expressed reasons for travel mode selection (in order of descending frequency) are: only available mode, no bus service available, convenience, and inability to drive. This last reason was expressed among individuals who are car passengers. A summary of reasons for travel mode choice is given in Table 105.)

Transit Needs

The transit problems in such a rural, low-density county as Sonoma are numerous. There is a need to establish a bus system between Healdsburg-Windsor-Santa Rosa and

Table 102

PRIMARY TRAVEL MODE CHOICE

SONOMA COUNTY	TRAVEL MODE (Numbers in percentages)								
TRAVEL PURPOSE	DRIVE CAR	CAR PASSENGER	REGULAR BUS	DEMAND RESPONSE BUS	RAILROAD	BART	WALK	BICYCLE MOTORCYCLE	OTHER
WORK	76	20	2				2		
MEDICAL	71	24					2		
GROCERIES	73	22					2	2	
SOCIAL SERVICES	566	22					2		
RECREATION	61	22	5				7	2	2
RELIGIOUS	63	27					2	2	
VISITING	63	27	7				2		

N = 41

Table 103

TRAVEL DESTINATION

SONOMA COUNTY	TRAVEL PURPOSE						
	WORK	MEDICAL	GROCERIES	SOCIAL SERVICES	RECREATION	RELIGION	VISITING
CITIES:							
Bakersfield							1
Cotati							1
Graton	1						
Healdsburg		13	10	13	5	11	5
Kenwood	1						
Mountain View							1
Napa					1		
Reno					1		
Rohnert Park		1	2				
San Francisco		1		2	6		3
San Jose	23	21	24	9	11	11	2
Santa Rosa	23	21	24	9	11	11	6
Sebastopol	1		2	1		3	5
Sonoma		1					
St. Helena							1
Vallejo							1
Windsor		7					9
County-Wide			2		3		2
Bay Area							1
Out of the Region					9		5

Table 104

ALTERNATE TRAVEL MODE CHOICE

SONOMA COUNTY	TRAVEL MODE (Numbers in percentages)								
TRAVEL PURPOSE	DRIVE CAR	CAR PASSENGER	REGULAR BUS	DEMAND RESPONSE BUS	RAILROAD	BART	WALK	BICYCLE MOTORCYCLE	OTHER
WORK	49	10	10	2			15	12	2
MEDICAL	32	20	12				7	5	
GROCERIES	29	24	12				7	5	
SOCIAL SERVICES	22	17	5				5	5	
RECREATION	24	22	12	5		2	10	7	
RELIGIOUS	22	12	2				15	7	
VISITING	22	12	10		2		5	2	

N = 41

Table 105

SONOMA COUNTY

REASONS FOR SELECTION OF TRAVEL MODE

	TRAVEL PURPOSE (Numbers in percentages)						
	WORK	MEDICAL	GROCERIES	SOCIAL SERVICES	RECREATION	RELIGION	VISITING
Only available mode	27	34	37	32	34	32	34
No bus service	29	20	22	12	15	22	22
Convenience	12	15	15	2	15	10	10
Unable to drive	7	5	7	5	10	5	7
Inadequate bus routes and stops		7	5	7		2	2
No car available	5			2		2	2
Least costly	2				2		5
Least travel time		2			2		

N=42

Sebastapol. These are areas where the largest number of the Spanish-heritage population reside. The solution might be the use of non-traditional transit modes, such as mini-buses or demand response buses.

Attention should be given to ways of facilitating rural residents in their work trips and travel to obtain medical and social servics. The level of service on the existing intra-city systems also needs to be improved.

Suggestions to Meet Transit Needs

The major suggestion by respondents in Sonoma County for meeting travel needs is that MTC should expand the system of bus routes throughout the county (Table 106.)

Conclusions and Recommendations - Sonoma County

The following are the concerns and transit-related issues as expressed by Sonoma County respondents, accompanied by recommendations for solutions.

Issue

o No transit service

Recommendations

- Expand existing bus routes.
- Provide feeder bus systems to existing bus routes.
- Provide bus routes between Healdsburg-Windsor-Santa Rosa-Sebastapol, via a non-conventional mini-bus system.

Issue

o Slow transit service

Recommendations

- Improve the level of service for existing transit systems.
- Improve existing Santa Rosa bus system.

Issue

o Inadequate transit (bus) stops

Recommendations

- Increase the number of bus stops.

Table 106

WAYS MTC CAN FACILITATE TRAVEL

	TRAVEL PURPOSE (Numbers in Percentages)						
SONOMA COUNTY	WORK	MEDICAL	GROCERIES	SOCIAL SERVICES	RECREATION	RELIGION	VISITING
Expand bus routes	63	71	73	66	71	63	61
Provide feeder buses		5					5
Reduce fares			2				
Improve bus scheduling	2						
Develop train routes to recreation area					2		
Provide Sunday service						2	

N = 41

Issue

o High fares

Recommendation

- Reduce transit fares.

Issue

o Inadequate transfer points

Recommendation

- Establish central transfer points in the cities along the Healdsburg-Santa Rosa-Sebastapol corridors.

XIII. CONCLUSIONS AND RECOMMENDATIONS

Population Distribution

The northern-southern dichotomy is employed here to discuss the transit issues which were elicited from the respondents to the Minority Needs Survey. There are 3,986,358 persons residing in the southern counties*, which accounts for 85.9% of the region's total population. This is also the case with minorities, where 1,110,299 or 92.4% of the region's total minority population reside.

Since the population distribution is skewed toward the south and concentrated on the Bay shore, the region can be divided into respective sets of southern and northern counties, and can be further divided into high and low-density population zones.

All of the northern counties** are classified as low-density population areas, with the exception of the southwestern sector of Solano County, centering in the City of Vallejo. The habitable areas of the southern counties contain the major high-population density areas. Even though the five southern counties are referred to as high-density areas, all, with the exception of San Francisco, have vast low-density zones proceeding away from the Bay.

The respondents from the various counties in the region have raised many transit-related issues. A summary of the twenty most frequently noted issues are listed by county on the Transit Issue Matrix on the following page. This matrix not only cites the issues which concern the respondents from these counties, it also is a means to determine if these concerns are regionalized by county group or density category.

The Issues

1. No Transit Service is an issue raised by the respondents from seven of the nine counties. Although minority citizens from Alameda, Contra Costa and Santa Clara voiced this concern, it is an issue of even greater concern in the northern (low density) counties, due to inadequate or non-existent transit services.

2. Inadequate Transit Service was a concern of respondents in four of the region's nine counties. Three of the counties where this issue was deemed important are found among the southern (high density) countes, excluding the highest density counties of Alameda and San Francisco.

3. No Direct Transit Service is an issue that was raised only in San Francisco, where public transit usage is relatively high.

4. Unreliable Transit Service mainly concern the northern (low density) counties, principally Marin, Napa and Solano. This suggests that the transit services which are available cannot be depended upon.

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* The southern counties are: Alameda, Contra Costa, San Francisco, San Mateo and Santa Clara.

** The northern counties are: Marin, Napa, Solano and Sonoma.

5. Slow Transit Service and the excessive travel time required to move from one location to another is a major concern throughout the region — both in the low and high-density counties. However, this concern is more prevalent in the southern counties, where the respondents from four of the five counties cited this as an important issue.

6. Lack of Transit Service In Off-Peak Periods is an issue which is almost universally raised throughout the region, whether the respondents are from a rural or urban setting. Most of the respondents with respect to this issue are found in the highly urbanized southern counties, with the exception of San Francisco.

7. Inadequate Transit (bus) Stops. In the low-density northern counties, the issue of inadequate transit (bus) stops was raised. This issue is of particular concern to respondents from Marin and Sonoma counties. In the southern counties, only San Mateo's respondents focused on this issue.

8. No Space for Groceries. The citizens of San Mateo and Marin counties respectively are concerned that transit vehicles are not designed to accommodate packages from grocery shopping trips. This issue is of particular concern to transit-dependent populations.

9. High Transit Fares. A concern for this issue is expressed by the respondents from eight of the nine counties surveyed. It is a concern which is nearly universal.

10. Inconvenient Transit Services. Although it is difficult to specify, the respondents from all but one county are concerned about the inconvenience that available transit service causes them. The range of these inconveniences are atrributable to available transit services.

11. Inadequate Transit Safety. The issue of transit safety is a universal concern for the southern counties where the respondents from all five counties expressed this view.

12. Lack of Bilingual Personnel and its potential impact on the full use of transit services by minorities is a concern expressed by respondents from Napa and San Mateo counties. However, this is an issue that could be a regional concern, particularly in areas where minority concentrations are heaviest.

13. Inadequate Senior Citizens Services. Concern for the level and quality of transit services for senior citizens was expressed by Alameda County respondents.

14. Inadequate Transit Service for the Physically Handicapped. Respondents from Alameda and San Francisco counties feel that adequate transit services are not available to the physically handicapped and that this is an issue of paramount concern.

15. Uncomfortable Transit Services. Responses in the high-density counties (San Francisco, San Mateo and Santa Clara), as well as in Napa county to the north indicate concerns about the level of comfort provided to transit users.

16. Inadequate Transfer Points. Napa and Sonoma respondents raised the issue that little attention is paid to the transfer points between the various transit routes, causing much inconvenience to users of transit services.

17. Inadequate Transit to Recreation Sites. The concern that public transit does not provide adequate access to recreational opportunities within the region was expressed by Contra Costa and Napa respondents.

18. Inadequate Transit Service to Shopping Facilities. Public transit as a means of access to shopping opportunities is viewed as inadequate by San Francisco and San Mateo minority populations.

19. Inadequate Transit Service to Medical Facilities. There is concern expressed in San Francisco and Napa that public transit does not facilitate trips for medical purposes.

20. Discourteous Transit Personnel. For three of the five southern counties (Alameda, San Francisco and San Mateo), the issue of discourteous transit personnel is raised. There is a feeling that transit vehicle operators are not concerned with user needs.

These are the concerns most often expressed by survey respondents. Specific concerns relative to each county and recommendations to meet transit needs are discussed in the respective county chapters (Chapters IV through XII).

Table 107

TRANSIT ISSUE MATRIX
SAN FRANCISCO BAY REGION

	Southern Counties (High Density)					Northern Counties (Low Density)			
ISSUES	Alameda	Contra Costa	San Francisco	San Mateo	Santa Clara	Marin	Napa	Solano	Sonoma
1. No transit service	X	X		X		X	X	X	X
2. Inadequate transit service	X	X		X	X	X			
3. No direct transit service	X	X	X						
4. Unreliable transit service	X					X	X	X	
5. Slow transit service	X		X	X	X		X		X
6. Lack of transit service in off-peak periods	X	X		X	X	X	X		
7. Inadequate transit (bus) stops				X		X			X
8. No space for groceries				X		X			
9. High fares	X	X	X	X	X	X	X		X
10. Inconvenient transit service	X	X	X	X	X	X	X	X	
11. Inadequate transit safety	X	X	X	X	X	X			
12. Lack of bilingual personnel				X			X		
13. Inadequate senior citizen service	X								
14. Inadequate transit services for the physically handicapped	X		X						
15. Uncomfortable transit vehicles	X		X	X	X		X		
16. Inadequate transfer points						X		X	X
17. Inadequate transit to recreation sites		X					X		
18. Inadequate transit service to shopping facilities	X		X	X					
19. Inadequate transit service to medical facilities			X	X					
20. Discourteous transit personnel	X		X	X					
TOTAL ISSUES BY COUNTY	10	7	10	14	7	9	9	4	5

Note: Shaded areas indicate predominance of transit issues between the Southern and Northern counties.

XIV. REGIONAL CONCLUSIONS & RECOMMENDATIONS

MCAC Recommendations & Conclusions

The primary purpose of the Minority Citizens Advisory Committee (MCAC) has been to assist the Metropolitan Transportation Commission (MTC) in perfecting effective methods and procedures for obtaining maximum input for minority citizens relative to the regional transportation planning process as well as to facilitate the flow of information and communications between the minority community and the Commission.

At one of the first MCAC meetings back in 1975, discussions were held with MTC Commissioners, the Executive Director, and key staff on the need for a mechanism to provide MTC with current and detailed information about the location of minority populations and unique minority transportation needs and issues.

The Minority Transportation Needs Assessment Project (MTNAP) has accomplished several major tasks:

1. Identified minority residential locations and population projections to the year 1990.

2. Surveyed and documented unique minority transportation needs and issues (e.g., needs related to language barriers, low automobile ownership and inadequate transportation services).

3. Compiled and summarized improvements recommended by minority citizens through community meetings and interviews.

A special task force of the Minority Citizens Advisory Committee throughout the entire project has worked alongside the MTNAP contractor, and in the later stages of the contract work assisted in evaluating the identified community needs, translated these into conclusions, and, finally, recommendations which can be adopted by MTC.

The recommendations comprise methods for increasing minority involvement and ways for needs to be addressed in the regional transportation planning process.

Conclusion

MCAC through the implementation of MTNAP, itself, has been able to assist MTC in generating a direct involvement of at least 1500 minority citizens and 61 minority organizations in 28 cities throughout the nine bay area counties.

Recommendation

That MTC continue agency support (e.g., staff) of MCAC and that MCAC County Sub-Committees be established comprised of the initial minority citizens and organizations involved through MTNAP for the purpose of providing a broader mechanism for minority involvement in MTC Sub-Regional or corridor activities as well as specific MTNAP followup issues.

Conclusion

MCAC through the implementation of MTNAP has been able to identify the need for transportation services to be specifically designed through non-conventional systems to meet the travel needs of minority populations who are characteristically low income, concentrated or affected by a language barrier.

Recommendation

That MTC fully support an MCAC MTNAP Conference to bring together representatives from Federal Agencies such as the Region IX Community Services Administration (CSA) and the U.S. Department of Health, Education & Welfare (HEW) for the purpose of assisting MTC in beginning meaningful communications with these agencies who are oriented towards providing program support to meet the human and social needs of minorities, low income groups, and other population groups; to formally provide an awareness of the MTNAP findings; and to begin to identify a practical and feasible work program for specific joint ventures between CSA, HEW, and MTC.

Conclusion

MCAC through the implementation of MTNAP has been able to identify the need for effective transportation planning relative to minority populations who find themselves located in rural areas which are viewed as low density and are not considered important as major urbanized areas. Minorities who live in the rural settings for the most part work in the agricultural employment centers and must commute significant distances to work by car. The same type of commute distance problem is evident for going to medical and social services and shopping for groceries.

Recommendation

That MTC consider placing a priority on planning for so called "low density areas" and that alternative transit systems be provided for the rural populations.

Conclusion

MCAC through the implementation of MTNAP has been able to identify a commonality of unique minority transportation needs and issues for the counties of Napa, Solano, and Sonoma.

Travel mobility patterns identified through MTNAP indicate the need for minorities to use cars to travel significant distances for going to work, either across these counties' lines or within each county.

The same travel mobility patterns are indicated for trips to medical and social services as well as shopping for groceries.

Recommendation

That MTC support the creation of MCAC Tri-County (Napa, Solano & Sonoma) Committee comprised of MCAC and members of minority citizens and organizations initially involved through MTNAP for the purpose of assisting MTC and the three counties in the design of a work program to plan and implement a Tri-County Non-Conventional System; and that MTC work with the counties in earmarking TDA funds for the carrying out the planning and implementation of transit services.

Conclusion

MCAC through the implementation of MTNAP has been able to identify several minority community concentrations throughout the five counties which have unique minority transportation needs and issues (e.g., agricultural setting, low income, heavy unemployment, low automobile ownership) which should be considered in the planning and development of non-conventional systems as well as improvements throughout the established institutional transit system.

Recommendation

That MTC initiate appropriate origin-destination studies for these areas and seek ways for the planning and development of non-conventional systems through support from District 4 CAL-TRANS' UMTA Section 16 (b) (2) program, and/or other appropriate sources.

Please Note: Five Counties and Cities

Contra Costa - Richmond
Marin - Marin City & West Marin
San Mateo County - Redwood City
Santa Clara - San Jose
Alameda - Oakland

Conclusion

MCAC through the implementation of MTNAP has been able to identify the need for current and annual minority population data.

MCAC recognizes that there are always problems with the simple acceptance of the census information documented every 10 years and that there is no way for migrating concerns with the census resulting from under representation of minorities.

MCAC further in recognizing that much of the transit system has been established in the Bay Area and since much of the capital costs have resulted in a vast amount of transit equipment, emphasis in most cases deal with short range planning. It is because of this aspect of the overall transportation planning and transit system, that data is needed which more current and up to date.

Recommendation

That MTC publish an estimated minority populations data report which includes all updates since 1970 (counties or cities) and that efforts be made to utilize this and following annual estimates as the regional minority population data base.

Conclusion

MCAC through the implementation of MTNAP has been able to identify the need for community service and reverse commute planning for the minority population in the county of San Francisco.

Most of the imformation collected in San Francisco through MTNAP indicates a large number of trips which basically originate and end in the same neighborhoods. These trips are for going to medical facilities, social service agencies, or simply shopping for groceries.

MCAC members who have been actively involved in transit route planning with Muni are aware of the grid system and recognize that some type of additional community service routes be implemented.

MCAC members and community groups in San Francisco County are also concerned over the lack of emphasis in reverse commute planning for San Francisco minorities to utilize Southern Pacific (SP) to gain access to employment centers. This concern is further compounded by the frustration of not being able to understand why Muni is not providing direct service either to San Mateo or Marin Counties. A major issue is that of the inadequate transfer planning whereby Muni and SAM-TRANS do not meet at county border lines for efficiency.

Recommendation

That MTC work with Muni and the County of San Francisco for adopting a concept of community line services utilizing at least 22 mini buses (2 per district).

Presently Muni does have several "community lines" and there have been preliminary discussions in the past concerning an application for mini bus funding.

That MTC should utilize the PENTAP Transit Dependent Study and any other appropriate data for fully ascertaining reverse commute planning and utilization of SP.

Conclusion

MCAC past and present accomplishments will be fully described in this conclusion to highlight the public relations aspect of MCAC's overall assistance to MTC in reaching the ninority community of the mine county bay area.

One other important factor to be documented will be the organizational development, discipline, and interaction with MTC staff.

Recommendation

That MTC request that the State Legislature amend AB 363 to include MCAC as a permanent mechanism for soliciting and disseminating information to and from the minority citizens, to the regional transportation planning process.

Needs Survey

The community meeting mechanism was employed in this Project as an effective way for minorities to communicate their real and perceived transportation needs. With the assistance of the MCAC, a total of 18 meetings was held in different community settings in the nine counties. These meeting sites were selected from a broad base of ethnic, cultural, religious, social, recreational, commercial and political considerations as well as using information on SSA gathered during Phase I. In addition, the Phase I maps made it possible to identify population clusters which were targeted as potential meeting areas. Meetings were publicly announced through the media and notices were circulated through six community based agencies.

At these public meetings, minority transportation needs and issues were discussed in open forum. Discussions were chaired by the MCAC county representative, who served as moderator. The county minority maps produced during Phase I for that particular county were available for the participants' review and a slide show was used to reveal background information on MTC and the MTNAProject. A matrix of issues was prepared for each meeting for discussion and focus. Discussions centered around the particular needs and transportation concerns unique to the communities in focus, taking into consideration transit dependence, automobile ownership, language barriers, special work schedules, and centers of employment.

APPENDIX A
Meeting Sites

Location	Date	Number In Attendance
NAPA COUNTY		
Centro De Informacion Y Servicios 627 St. Helena Highway St. Helena, CA	September 8, 1977	55
Calistoga Community Center 1365 Lincoln Avenue Calistoga, CA	September 13, 1977	32
Emanuel Lutheran Church 3875 Jefferson Street Napa, CA	September 21, 1977	29
SONOMA COUNTY		
St. John's Parish Hall 215 Tucker Street Healdsburgh, CA	October 18, 1977	30
Sebastopol Memorial Bldg. 282 High Street Sebastopol, CA	October 25, 1977	8
Santa Rosa Recreation Ctr. 415 Steele Lane Santa Rosa, CA	November 3, 1977	52
SOLANO COUNTY		
Vacaville Community Ctr. 1100 Alamo Drive Vacaville, CA	November 8, 1977	48
Navy Elks Club 1020 Alabama Street Vallejo, CA	November 10, 1977	27
MARIN COUNTY		
Manzanita Community Ctr. 630 Drake Avenue Marin City, CA	December 6, 1977	22

Davidson Middle School 280 Woodland Avenue Room 202 San Rafael, CA	December 7, 1977	30
CONTRA COSTA COUNTY		
Japanese American Citizens League Walden Road Walnut Creek, CA	December 8, 1977	28
Japanese American Religious & Cultural Center 3165 Treat Blvd. Concord, CA	December 15, 1977	25
ALAMEDA COUNTY		
Kennedy Community Center 1333 DeCoto Road Union City, CA	February 14, 1977	20
Lincoln School 225 11th Street Oakland, CA	March 29, 1978	22
Bay Area Preparation Program 2975 Sacramento Street Berkeley, CA	April 25, 1978	25
SAN MATEO COUNTY		
Municipal Council Bldg. 2415 University Avenue East Palo Alto, CA	February 24, 1978	55
Fair Oaks Community Ctr. 2600 Middlefield Road Redwood City, CA	March 23 1978	115
SANTA CLARA COUNTY		
Confederacion De La Raza Unida Del Condado De Santa Clara 1711 -C- McKee Road San Jose, CA	March 21, 1978	26
SAN FRANCISCO COUNTY		
Fireman's Fund Insurance Auditorium 3333 California Street San Francisco, CA	March 30, 1978	36

APPENDIX B

Community Based Organizations Contacted During Study

IDENTITY NUMBER	NAME OF THE ORGANIZATION	LOCATION OF THE ORGANIZATION	JURISDICTIONAL AREA
1	Napa County For Economic Opportunity	1736 Jefferson St. Napa, CA	County
2	Centro De Informacion Y Servicios	627 St. Helena Highway St. Helena, CA	City
3	Calistoga Community Center	1365 Lincoln Ave. Calistoga, CA	City
4	Organizacion Latino Americana De Liberacion Economica	1151 Valleyview St. St. Helena, CA	City
5	Concillo Campesino De Benito Juarez	1427 Lake St. Calistoga, CA	City
6	Housing Association for Napa Development	2010 Jefferson St. Napa, CA	County
7	California Human Development Corp.	2462 Mendocino Ave. Santa Rosa, CA	County
8	United Latins of Sonoma County, Inc.	3361 Fulton Road Santa Rosa, CA	County
9	Filipino Community of Sonoma County Inc.	3361 Fulton Road Santa Rosa, CA	County
10	Sonoma County People	930 Pinoer Road	County
11	N.A.A.C.P. Of Vallejo	P.O. Box 5091 Vallejo, CA	City
12	Navy City Elks Club	1020 Alabama St. Vallejo, CA	City

IDENTITY NUMBER	NAME OF THE ORGANIZATION	LOCATION OF THE ORGANIZATION	JURISDICTIONAL AREA
13	Adele B. Ashford Temple Elks	1710 Magazine St. Vallejo, CA	City
14	FELAD-IMAGE De Vallejo Federation of Employed Latin American Descendents	P.O. Box 1735 Vallejo, CA	County
15	Campesinos Progressistas	406 Main St. Vacaville, CA	County
16	Solano County Economic Opportunity Council Inc.	P.O. Box 196 Fairfield, CA	County
17	La Familia Agency of Marin County	929 Tamalpais Rd. San Rafael, CA	County
18	La Raza Outreach Program	College of Marin Kentfield, CA	CountyC
19	La Escuela Central	536 Third St. San Rafael, CA	County
20	Human Rights Commission Human Relations Dept. County of Marin	County Bldg. San Rafael, CA	County
21	Community Action Marin	21 Tamal Vista Corte Madera	County
22	Community Services Dist.	630 Drake Ave. Marin City, CA	City
23	Southside Community Center	745 Marina Way South Richmond, CA	County

IDENTITY NUMBER	NAME OF THE ORGANIZATION	LOCATION OF THE ORGANIZATION	JURISDICTIONAL AREA
24	United Council of Spanish Speaking Organizations (UCCSO)	2229 McDonald Ave. Richmond, CA	County
25	UCSSO ————	516 Main St. Martinez, CA	County
26	UCSSO ————	260 East 10th St. Pittsburgh, CA	County
27	UCSSO ————	Highway 4 Oakley, CA	County
28	UCSSO ————	120 Oak St. Brentwood, CA	County
29	Office of Economic Opportunity	2265 Contra Costa Blvd. Pleasant Hill, CA	County
30	Japanese American Citizens League	Walden Street Walnut Creek, CA	City
31	Japanese American Religious and Cultural Center	3165 Treat Blvd. Concord, CA	City
32	Oakland Citizens Committee For Urban Renewal (OCCUR)	1415 Broadway St. Oakland, CA	City
33	Neighborhood Design Center Of Oakland	7111 Chabot Rd. Oakland, CA	City
34	Alameda County Commission on Aging	1755 Broadway St. Oakland, CA	County
35	Centro De Servicios De Alameda County	309 -H- Street Union City, CA	County

IDENTITY NUMBER	NAME OF THE ORGANIZATION	LOCATION OF THE ORGANIZATION	JURISDICTIONAL AREA
36	Alameda County Training Board	22738 Mission Blvd. Hayward, CA	County
37	Spanish Speaking Unity Council	1900 Fruitvale Ave. Oakland, CA	County
38	Confederacion De La Raza Unida Del Condado De Santa Clara	1711 -C- McKee Road San Jose, CA	County
39	Mexican American Community Services Agency	332 N. Second St. San Jose, CA	County
40	Asian Americans for Community Involvement	2195 Maykirk Road San Jose, CA	County
41	PROBE Community Center	2615 Fair Oaks Ave. Redwood City, CA	City
42	Target Education & Welfare Council Inc.	2615 Fair Oaks Ave. Redwood City, CA	City
43	Senior Citizens Drop-In Center	2555 Middlefield Road Redwood City, CA	City
44	Catholic Social Service	70 North San Mateo Drive San Mateo, CA	County
45	East Palo Alto Development Center	University Ave. East Palo Alto, CA	City
46	Coastside Opportunity Center	840 Main St. Half Moon Bay	City

IDENTITY NUMBER	NAME OF THE ORGANIZATION	LOCATION OF THE ORGANIZATION	JURISDICTIONAL AREA
47	Fair Oaks Community Center	2600 Middlefield Road Redwood City, CA	City
48	St. Anthony's Church	3500 Middlefield Road Menlo Park, CA	City
49	San Mateo Economic Opportunities Commission	621 Middlefield Road Redwood City, CA	County
50	Richmond Maxi-Center	3626 Balboa St. San Francisco, CA	City
51	Korean Service Center	3136 Fulton St. San Francisco, CA	City
52	T.R.I.P.	1801 Mason St. San Francisco, CA	City
53	O.E.C. Western Addition	P.O. Box 1517 San Francisco, CA	City
54	Nichonmachie Pol. Assn.	178 - 21st Ave. San Francisco, CA	City
55	Chinatown Neighborhood Improvement Resource Center	1441 Powell St. San Francisco, CA	City
56	Bay Area Coalition of Koreans	473 Buena Vista Alameda, CA	Tri-County
57	Chinese For Affirmative Action	950 Stockton St. San Francisco, CA	City

IDENTITY NUMBER	NAME OF THE ORGANIZATION	LOCATION OF THE ORGANIZATION	JURISDICTIONAL AREA
58	Lily of the Valley Church	23rd & Florida St. San Francisco, CA	City
59	United Pilipinos For Equal Employment	944 Market St. San Francisco, CA	City
60	San Francisco Study Center	P.O. Box 5646 San Francisco, CA	City
61	Artistas Del Sol Y Tierra	1711 -C- McKee Road San Jose, CA	County

APPENDIX C
Questionnaires

JEFFERSON ASSOCIATES, INC.
155 Montgomery Street, Suite 808
San Francisco, California 94104

Fall 1977 - Winter 1978
#MTNAP 00177-78

MINORITY TRANSPORTATION NEEDS SURVEY
SAN FRANCISCO BAY REGION

Metropolitan Transportation Commission

Date _____

City _____

County _____

INSTRUCTIONS

This questionnaire is completely voluntary. However, your answers will assist us in assessing the transportation needs of minorities in your county and in making recommendations to improve the transportation available to minority persons.

This questionnaire should be filled out by each person present at this meeting. On the cover sheet, please note the date and the city and county in which this meeting is being held. If you should come to any question which you don't understand, just let the interviewer know and then go on to the next question.

Your assistance in this project to assess minority transportation needs is greatly appreciated. The information provided in this questionnaire will become part of a final report to the Metropolitan Transportation Commission.

WORK

irst, I would like to ask you some general questions about your trips
o different places in your County.

MOBILITY

1. How do you usually travel to work?

Drive Car	Car Passenger	Regular Bus	Demand Response Bus	Railroad	BART
☐	☐	☐	☐	☐	☐

Walk	Bicycle / Motorcycle	Other	
☐	☐	☐	Please Specify _____

2. Where do you work? City _____

ACCESSIBILITY

1. What other ways could you travel to work?

Drive Car	Car Passenger	Regular Bus	Demand Response Bus	Railroad	BART
☐	☐	☐	☐	☐	☐

Walk	Bicycle / Motorcycle	Other	
☐	☐	☐	Please Specify _____

PERCEIVED NEEDS & RECOMMENDED IMPROVEMENTS

1. Please explain why you travel to work in the manner indicated above (in A-1).

_____

_____

_____

_____

2. What transportation improvements do you feel MTC could make to facilitate your travel to work?

_____

_____

_____

_____

MEDICAL SERVICES

A. MOBILITY

1. How do you usually travel when obtaining medical services?

Drive Car	Car Passenger	Regular Bus	Demand Response Bus	Railroad	BART
☐	☐	☐	☐	☐	☐

Walk	Bicycle/ Motorcycle	Other	
☐	☐	☐	Please Specify _____

2. Where do you go to receive these services?

City_____

B. ACCESSIBILITY

1. What other ways could you travel to medical appointments?

Drive Car	Car Passenger	Regular Bus	Demand Response Bus	Railroad	BART
☐	☐	☐	☐	☐	☐

Walk	Bicycle/ Motorcycle	Other	
☐	☐	☐	Please Specify _____

C. PERCEIVED NEEDS & RECOMMENDED IMPROVEMENTS

1. Please explain why you travel to medical appointments in the manner indicated above (in A-1).

_____

_____

_____

_____

2. What transportation improvements do you feel MTC could make to facilitate your travel to appointments?

_____

_____

_____

_____

SHOPPING

A. MOBILITY

1. How do you usually travel when shopping for groceries?

Drive Car	Car Passenger	Regular Bus	Demand Response Bus	Railroad	BART
☐	☐	☐	☐	☐	☐

Walk	Bicycle/ Motorcycle	Other	
☐	☐	☐	Please Specify _____

2. Where do you usually shop for groceries?

City _____

B. ACCESSIBILITY

What other ways could you travel when shopping for groceries?

Drive Car	Car Passenger	Regular Bus	Demand Response Bus	Railroad	BART
☐	☐	☐	☐	☐	☐

Walk	Bicycle/ Motorcycle	Other	
☐	☐	☐	Please Specify _____

C. PERCEIVED NEEDS & RECOMMENDED IMPROVEMENTS

1. Please explain why, when shopping for groceries, you travel in the manner indicated above (A-1).

_____

_____

_____

_____

_____

2. What transportation improvements do you feel MTC could make to facilitate your travel when shopping?

_____

_____

_____

_____

_____

SOCIAL SERVICES

A. MOBILITY

1. How do you usually travel to obtain social services?

Drive Car	Car Passenger	Regular Bus	Demand Response Bus	Railroad	BART
☐	☐	☐	☐	☐	☐

Walk	Bicycle/ Motorcycle	Other	
☐	☐	☐	Please Specify _____

2. Where are the agencies you usually travel to?

City_____

B. ACCESSIBILITY

1. What other ways could you travel to these agencies?

Drive Car	Car Passenger	Regular Bus	Demand Response Bus	Railroad	BART
☐	☐	☐	☐	☐	☐

Walk	Bicycle/ Motorcycle	Other	
☐	☐	☐	Please Specify _____

C. PERCEIVED NEEDS & RECOMMENDED IMPROVEMENTS

1. Please explain why you travel to the agencies in the manner indicated above (in A-1).

_____

_____

_____

_____

2. What transportation improvements do you feel MTC could make to facilitate your travel to these agencies?

_____

_____

_____

_____

RECREATIONAL TRIPS

A. MOBILITY

1. How do you usually travel when taking recreational trips?

Drive Car	Car Passenger	Regular Bus	Demand Response Bus	Railroad	BART
☐	☐	☐	☐	☐	☐

Walk	Bicycle / Motorcycle	Other	
☐	☐	☐	Please Specify _____

2. Where do you usually go for recreation?

City_____

B. ACCESSIBILITY

1. What other means of travel could you use for recreation purposes?

Drive Car	Car Passenger	Regular Bus	Demand Response Bus	Railroad	BART
☐	☐	☐	☐	☐	☐

Walk	Bicycle / Motorcycle	Other	
☐	☐	☐	Please Specify _____

C. PERCEIVED NEEDS & RECOMMENDED IMPROVEMENTS

1. Please explain why you use the manner of travel indicated above (A-1) for recreational trips.

_____

_____

_____

_____

2. What transportation improvements do you feel MTC could make to facilitate your recreation oriented travel?

_____

_____

_____

_____

RELIGIOUS SERVICES

A. MOBILITY

1. How do you usually travel when attending religious services?

Drive Car	Car Passenger	Regular Bus	Demand Response Bus	Railroad	BART
☐	☐	☐	☐	☐	☐

Walk	Bicycle / Motorcycle	Other	
☐	☐	☐	Please Specify _____

2. Where do you usualy go to attend religious services?

City _____

B. ACCESSIBILITY

1. What other ways could you travel to religious services?

Drive Car	Car Passenger	Regular Bus	Demand Response Bus	Railroad	BART
☐	☐	☐	☐	☐	☐

Walk	Bicycle / Motorcycle	Other	
☐	☐	☐	Please Specify _____

C. PERCEIVED NEEDS & RECOMMENDED IMPROVEMENTS

1. Please explain why you travel to religious services in the manner indicated above (in A-1).

_____

_____

_____

_____

2. What transportation improvements do you feel MTC could make to facilitate your travel to religious services?

_____

_____

_____

_____

VISITING FRIENDS OR RELATIVES

A. MOBILITY

1. How do you usually travel when visiting friends or relatives?

Drive Car	Car Passenger	Regular Bus	Demand Response Bus	Railroad	BART
☐	☐	☐	☐	☐	☐

Walk	Bicycle / Motorcycle	Other	
☐	☐	☐	Please Specify _____

2. Where do you most frequently travel to visit friends or relatives?

City_____

B. ACCESSIBILITY

1. What other means of travel could you use when visiting?

Drive Car	Car Passenger	Regular Bus	Demand Response Bus	Railroad	BART
☐	☐	☐	☐	☐	☐

Walk	Bicycle / Motorcycle	Other	
☐	☐	☐	Please Specify _____

C. PERCEIVED NEEDS & RECOMMENDED IMPROVEMENTS

1. Please explain why you travel to visit friends or relatives in the manner indicated above (in A-1).

_____

_____

_____

_____

2. What transportation improvements do you feel MTC could make to facilitate your trips to visit friends or relatives?

_____

_____

_____

_____

SECTION II: DEMOGRAPHIC CHARACTERISTICS

A. Where do you live?

County_____

City_____

B. What ethnic or racial category or categories describe you the closest?

Spanish Heritage . . . . . ☐

Chinese. . . . . ☐

Japanese . . . . . ☐

Filipino . . . . . ☐

Black. . . . . ☐

C. Are you currently employed? . . . . . No ☐ Yes ☐

D. Do you own a car? . . . . . No ☐ Yes ☐

Do you own more than one car, and if so, how many? _____

E. Including yourself, how many people live in your household? . . . . . _____

F. How many of these people are employed half-time or more? . . . . . _____

G. What is the range of your total family income (before taxes)?

Under $5,000 ☐	$15,000-$19,999 ☐
$5,000-$6,999 ☐	$20,000-$24,999 ☐
$7,000-$9,999 ☐	$25,000-$49,999 ☐
$10,000-$14,999 ☐	$50,000 or more ☐

H. What is your age? _____ I. Sex: Female ☐ Male ☐

J. How much school have you completed?

Less than high school graduate . . . . . ☐	Some college. . . . . ☐
	4-year college graduate . . . ☐
Graduated from high school . . . . . ☐	More than 4 years of college ☐

K. Do you have any difficulty seeing? . . . . . Yes ☐

Do you have any difficulty hearing? . . . . . Yes ☐

Do you have any difficulty walking? . . . . . Yes ☐

L. Are there any final comments you would like to make on your transit needs or other transit related issues?